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City of Newark, New Jersey

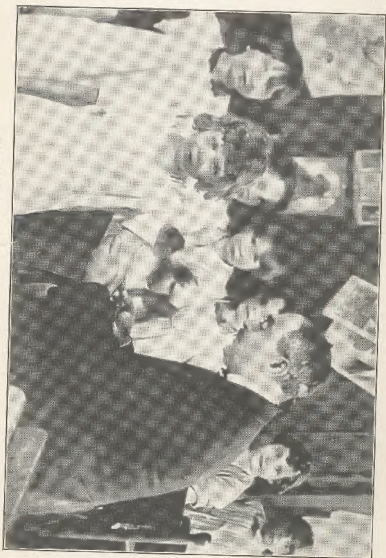
THIRTY-EIGHTH  
ANNUAL REPORT

OF THE

# Department of Health



For the Year Ending December 31, 1922



Dr. Schick Performs the "Schick" Test in New York City.

## "OUR DAILY BREAD"

"It is a thought to me awful and beautiful that of the daily prayer, 'Give us this day our daily bread,' and of the myriads of fellow-men uttering it, in care and in sickness, in doubt and in poverty, in health and in wealth."—*William M. Thackeray.*

---

TO THE READER:

The lesson conveyed in the Annual Report for 1922 is that the prevention of respiratory contagious diseases is only possible by the active assistance of an informed and intelligent public opinion. A knowledge of the symptoms, treatment and quarantine measures needed in epidemic children's diseases should be one of the essentials of education in our high schools and teachers' colleges.

CHARLES V. CRASTER, M. D., D. P. H.,  
*Health Officer.*

Newark, March 1, 1923.

Acknowledged



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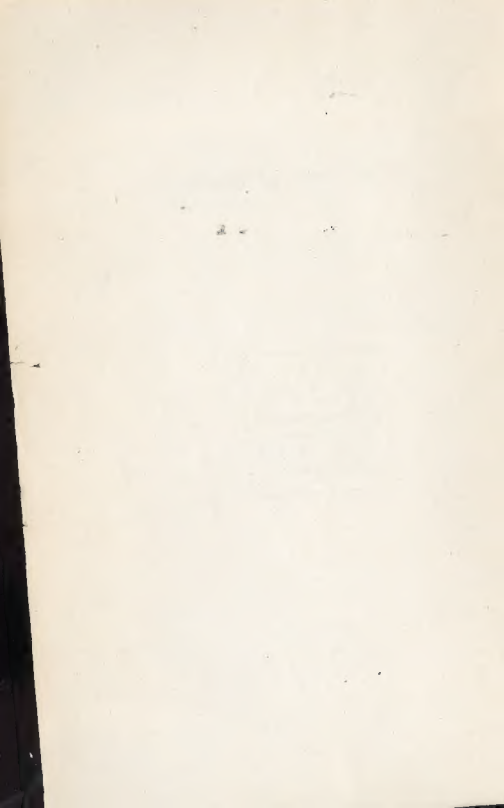
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CHARLES V. CRASTER, M. D., D. P. H.,  
*Health Officer.*

Newark, March 1, 1923.

Acknowledged 11/14



**DEPARTMENT OF HEALTH**  
[DEPARTMENT OF PUBLIC AFFAIRS]  
CITY OF NEWARK

*Director*.....FREDERICK G. BREIDENBACH, Mayor  
*Health Officer*.....CHARLES V. CRASTER, M. D., D. P. H.

---

OFFICES

Headquarters, Plane and William Streets.....Phone 3310 Mitchell  
City Dispensary, Plane and William Streets.....Phone 3310 Mitchell  
Laboratories (Bacteriological, Pathological and Serological)  
Hospital Building, 116 Fairmount Avenue.....Phone 9300 Market  
Chemist, H. B. BALDWIN, 927 Broad Street.....Phone 1100 Mulberry

*In Memoriam*



THOMAS MULLIGAN.

Chief Inspector of the Disinfecting Division.  
Twenty-eight years of faithful service.

1894-1922



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## EMPLOYEES OF THE DEPARTMENT OF HEALTH

### EXECUTIVE DIVISION

CHARLES V. CRASTER.....	Health Officer
DAVID D. CHANDLER (Retired).....	Health Officer
WILLIAM J. BUEHLER.....	Clerk-Bookkeeper
ROBERT F. MORGAN.....	Clerk-Stenographer
HENRY A. HABIG.....	Clerk-Stenographer
GRACE O'CONNOR.....	Clerk-Typist
MARCELLA DELACHY.....	Telephone Operator
MALCOLM HUNTER.....	Multigraph Operator
ELBERT S. BALL.....	Clerk, Vital Statistics
CORA B. NATLAN.....	Clerk
AUGUST W. JAKOSCH.....	Janitor
JAMES P. MADDEN.....	Night Custodian
CHARLES A. HARTMAN.....	Janitor
JOSEPH COLLINS.....	Chauffeur

### SANITARY DIVISION

WILLIAM H. YOUNG.....	Chief Clerk, Sanitary Division
ANDREW J. BRADY.....	Chief Sanitary Inspector
BERNARD J. CAHILL.....	Health Inspector
LEWIS E. BOUTILLIER.....	Health Inspector

#### Inspectors

WILLIAM HOPPER	PATRICK J. BROGAN
CHARLES H. BURKE	ADOLPH O. ELSASSER
HUBERT O'ROURKE	GUSTAVUS E. FRIEDEMANN
ANTONIO PANZERA	CLARENCE J. PALMER
PATRICK J. KRATING	EDWARD A. CLEARY
JAMES J. WATERS	THOMAS P. WALSH
HENRY MACDONALD	EDWARD GAYNOR
JAMES WHELAN	JAMES J. MCCARRON
EDWARD J. FLYNN	CHARLES K. McLAUGHLIN
CHARLES E. DIVINE	EDMOND A. RYAN
HOWARD HUFFERT	DANIEL MURPHY
JOSEPH A. MAGUIRE	WILLIAM KRANE

#### ROCCO J. DEL TUFO

JOHN P. ROGERS.....	Clerk-Stenographer
EDWARD A. SMITH.....	Clerk-Stenographer

## DEPARTMENT OF PUBLIC AFFAIRS

## PLUMBING DIVISION

CHARLES A. HALLGRIN, *Chief Plumbing Inspector*  
*Inspectors*  
 ANDREW J. MCGOOKIN JACOB KULL  
 EDWARD P. COUTS J. L. WHITMAN  
 PATRICK J. MOWAGHAN

## FOOD AND DRUG DIVISION

SAMUEL G. SHAWWILL, *Chief Food and Drug Inspector*  
 HERBERT B. BALLWIN, *Chemist*

*Food and Drug Inspectors*

JOSEPH E. CONNOLLY, ARTHUR E. HOERNIG  
 HENRY F. KVELLEN, WILLIAM G. HEILMANN

*Milk Inspectors*

RICHARD JACKSON, JOHN LEVINE  
 DAVID E. MORGAN

CATHERINE L. MANNING, *Clerk Typist*  
 GRACE E. WEHR, *Clerk*

## VETERINARY MEAT INSPECTION BUREAU

WERNER RUNGE, *Chief*  
 JOHN N. WITTIERN, *Veterinarian*  
 OTTO R. LEIS, *Veterinarian*

*Meat Inspectors*

DANIEL KUHN, CHARLES EDELHAUSME  
 HARRY A. BRYDEN  
 GRACE E. McNALLY, *Stenographer Clerk*

## DISINFECTING DIVISION

\*THOMAS MILLIGAN, *Chief Disinfecting Inspector*  
 CHARLES F. CONRAI, *Acting Chief Disinfecting Inspector*  
 MARY F. MCGUINNESS, *Clerk Stenographer*  
 JENNIE McNALLY, *Clerk*

*Sanitary Inspectors*

RICHARD J. CORBLEY, THOMAS F. NEWTON  
 GEORGE W. GILMORE, LEO C. DUFFY  
 IRWIN C. DAKIN, JOHN A. DONOVAN  
 GEORGE A. VAN HOUTEN, OBADIAH S. COLE  
 FREDERICK W. NICHOLS, GARRETT E. ST. JOHN  
 JOSEPH WILLIAM GARDIN, *Clinic Physician*

\*Deceased November 11 1922

## PAROCHIAL SCHOOL INSPECTION

*Nurses*

ANNA FULTON  
 IRENE M. MAWER  
 SUZANNE A. SADLER

MARY E. CLINTON  
 ANNA LIEBLER  
 EFANOR FAHY

## DISTRICT PHYSICIANS

WATSON F. L. ROSEMAN  
 THOMAS I. KELLY  
 ABRAHAM ROYBACH

WILLIAM T. ROMAGE  
 MEYER JEBEL  
 M. I. COFFEY

## CITY DISPENSARY

HENRY OLTMAN	<i>Apothecary</i>
ARTHUR F. WARRER	<i>Assistant Apothecary</i>
JOSEPH A. SHIRAM	<i>Chief Physician</i>
ALICE I. DORAN	<i>Record Nurse</i>
ELLA SCHWINN	<i>Nurse</i>
JEAN WAUGH	<i>Nurse</i>
LEO J. MCMANUS	<i>Dentist</i>
J. F. H. GLIBBE	<i>Librarian</i>
NATHAN B. HOLLER	<i>Publicist</i>
PHILIP BAYER	<i>Massen</i>
CLARA B. McLELLAND	<i>Massen</i>
MARY A. BAYER	<i>Massen</i>
MATILDA ZIMMERMAN	<i>Massen</i>
LOUISE MILLER	<i>Massen</i>
VAN S. HURLBURT	<i>Janitor</i>
ROSE MOORE	<i>Cleaner and Helper</i>
MARY B. GRANT	<i>Cleaner and Helper</i>

## BUREAU OF VENereal DISEASE CONTROL.

H. J. F. WALHAUSER, M.D.	<i>Director</i>
CARL LEROY WOOD	<i>Assistant Director</i>
MEIVINA H. RYAN	<i>Record Nurse</i>
EDNA B. W. SMITH	<i>Visiting Nurse</i>
JAMES CENIANNI	<i>Male Attendant</i>
JACOB F. SCHAEFFER	<i>Male Attendant</i>

## DEPARTMENT OF PUBLIC AFFAIRS

## PLUMBING DIVISION

CHARLES A. HALICRING, *Chief Plumbing Inspector*

*Inspectors*

ANDREW J. MCGOOKIN

JACOB KULL

EDWARD P. COULSTON

JOHN L. WHELAN

PATRICK J. MONAGHAN

## FOOD AND DRUG DIVISION

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HERBERT B. BALDWIN, *(Chemist)*

*Food and Drug Inspectors*

JOSEPH E. CONNOLLY

ADOLPH E. HOERNIG

HENRY F. KNIFLER

WILLIAM G. HILMANN

JOHN C. PROSCH

*Milk Inspectors*

RICHARD JACKSON

DAVID E. MORGAN

JOHN LEVINE

CATHERINE F. MAHONEY, *Clerk-Typist*

GRACE E. WEIR, *Clerk*

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*Sanitary Inspector*

RICHARD J. CORREY

THOMAS F. NEWBUN

GEORGE W. GILMORE

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*Clinic Physician*

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LEO J. MCMANUS	<i>Dentist</i>
I. E. H. GUERRE	<i>Dentist</i>
NATHAN B. HELLER	<i>Pathologist</i>
PHILIP BAYER	<i>Massenur</i>
CLARA B. McLELLAND	<i>Massenur</i>
MARY A. BAYER	<i>Massenur</i>
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EDNA B. W. SMITH	<i>Visiting Nurse</i>
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JACOB F. SCHAMBER	<i>Male Attendant</i>

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 PATRICK J. MONAHAN

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 GRACE E. WEIR *Clerk*

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 OTTO R. LIND - - - - - *Inspector*

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M. J. COFFEY

## CITY DISPENSARY

HENRY OLTMAN	Apocary
ARTHUR F. WARREN	Asst. Apocary
JOSEPH A. SCHRAMM	Physician
ATT & I. DORAN	Nurse
ETNA SCHWIMM	Nurse
JEAN WATCHE	Nurse
LEO J. MCMAHON	Dentist
J. L. H. CUTHRIE	Dentist
NATHAN B. HELPER	Pathologist
PHILIP BAYER	Masser
CLARA B. McLELLAND	Masser
MARY A. BAYER	Masser
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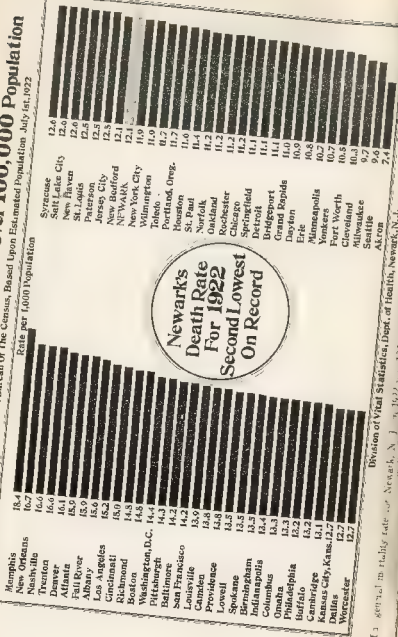
ANNUAL REPORT

OF THE

**Health Officer**

# Annual Death Rates For 1922 In Cities Over 100,000 Population

Tabulation By The U.S. Bureau Of The Census, Based Upon Estimated Population July 1st, 1922



Newark's  
Death Rate  
For 1922  
Second Lowest  
On Record

For general mortality rate of Newark, N. J. in 1922 was 12.1 per 1,000 in the United States.

Division of Vital Statistics, Dept. of Health, Newark, N. J.

bringing about close personal contact. It is observed that in open, mild winters, the contagious disease prevalence is low and the reverse is the case in severe, snowbound times. The mortality, however, of epidemic infections is frequently slight and in spite of the fact that the early part of the year experienced a widespread visitation of children's diseases, the case fatality did not seriously bring up the general death rate for the year. The latter half of the year was remarkably free from diseases so that the annual mortality for 1922 was but nine-tenths of a point above that for the previous year. Under special causes of death the figures for the year are remarkable, particularly with regard to tuberculosis. The deaths under one year for the last half of the year were exceptionally low, and had it not been for the mortality during the first half of the year would have been a record one as far as infant mortality is concerned.

#### RESPIRATORY DISEASES THE PROBLEM

The part played by respiratory diseases is an important one in all city mortality tables. It is clear that these diseases were responsible for the increased death rate for 1922. There were 33 more deaths from measles in 1922 as compared with 1921 and the proportion was much larger where pneumonia is considered, there being 189 more deaths from this cause than in the previous year.

Among the large increases in mortality are deaths from organic heart disease, 130 more than in 1921. This cause of death deserves a painstaking inquiry by health experts. There is apparently little reason for the increase as observed by the average business man. The tension of work is probably little changed from previous years and in fact there is an increasing tendency for the business man to ease up on his speed schedule. Outdoor sports are obtaining an increasing hold upon the community and it may be said that the "daily dozen" is a popular and real recreation. It might be

well, however, for the average man to adopt some minute examination by a physician, at least to determine whether his methods of relaxation are harmful or otherwise.

#### TYPHOID FEVER

The increase in typhoid fever prevalence noticed in 1921 was continued into the year 1922 so that the favorable rates of the five previous years were not maintained. Thus, five cases of typhoid fever and three deaths were traced to a farm supplying raw milk to the city. Investigation disclosed the presence on the farm, where he was employed as a dairyman, of a known typhoid fever carrier. This man, Tony La Bella, a Sicilian, had been many years in the United States. He was responsible for a previous outbreak in an institution in Sussex County, N. J., and had been released upon his promise to abstain from fecal handling. This promise he did not keep with the result of the Newark outbreak. He was committed to the Newark City Hospital by a judge of the Court of Common Pleas under the state law. After a six weeks' detention he was willing to enter into any agreement for his release. He finally put up a bond for his good behavior and signed an agreement permitting the department to broadcast his photograph and description among the dairies of the state.

#### DIPHTHERIA

Somewhat disturbing is the increase in deaths from diphtheria reported during the year. In spite of the knowledge among physicians and the public of the curative value of diphtheria antitoxin the disease apparently reaps an increasing number of victims. Many of the cases could have been saved were a correct diagnosis of the condition made in time. The unusual number of 29 more deaths than in the previous year is of course partly due to the measles and pneumonia prevalence. Still it drives home the absolute need of a routine nose and throat swab from all children with fever and cough.

under ten years of age. Such precautions, however, would be unnecessary and a heavy load of fear removed from the shoulders of parents with children were it recognized that in the toxin-antitoxin immunization against diphtheria, we have a safe and certain method of driving diphtheria into those shades holding the specters of smallpox, typhus fever and malaria.

Familiarity breeds contempt and the clanging bell of the ambulance is soon forgotten.

A noticeable decrease in contagion during the year was that due to scarlet fever. For over two years this disease has been prevalent widely in a mild form, which has made diagnosis at times difficult and accounts for its persistent character. Among the 1,597 cases reported during the year, the case mortality was less than one per cent.

#### ACCIDENTAL DEATHS

One of the most complex and important problems in our city life is the question of death from accident. In Newark during 1922 there were 257 deaths from accident and no fewer than 78 were due to automobiles, as compared with 64 during the previous year. In nearly every city of importance in the country is reported a similar increase in automobile fatalities. In Buffalo the increase was 27; Boston, 17; Chicago, 23; Detroit, 34, and Philadelphia, 56. Many of these deaths occur at the "zero hour" of traffic in the late afternoon and are presumably due to carelessness or haste of both driver and pedestrian. It is time that "taking a chance" should no longer be looked upon as "smart." Some form of fine for the pedestrian as well as the driver might have a deterrent effect on "jay walkers." Pedestrians will stand close up to the traffic line on crowded thoroughfares without realizing that the swerve of an inch by any of the moving vehicles might bring about instant death.

## CITY POPULATION

The population of the city is estimated at 432,000 for 1922. This represents only those householders actually living within the city boundaries. Newark, like New York City, has a large floating population made up of workers who come to the city to labor and who live in some suburban locality. The city boundaries should be extended to include such districts which are as much a part of the city as its other residential districts. The city of Newark is one of the most densely populated areas its 14,976 acres giving a density of 28.8 per acre which is greater than any other city except Somerville, Mass., which has 34.5. The city thus very much requires the outlet of more sparsely settled areas in its immediate surroundings. Large open districts with land of a reasonable price promote the building of single homes so vital a need for the city. On the other hand congested areas of high and pure attract the apartment house builder with all the drawbacks to tenant life that such places bring about. The apartment house is no doubt a necessity of modern life but the desirability of private home building will always be the urgent need for city populations.

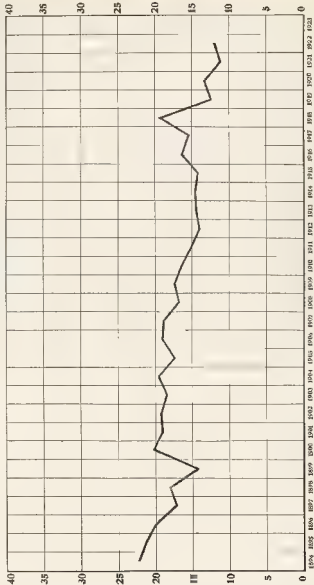
## DEATH RATE FOR 1922

12.1 PER 1,000

The total deaths from all causes during 1922 numbered 5,209, an increase of 433 over the previous year, making a mortality rate of 12.1 per thousand upon an estimated population of 432,000. This rate is nine-tenths of a point higher than in 1921, which was 11.2 per 1,000, in a year of greater freedom from epidemic disease which established the lowest death rate on record. The average annual mortality for the five-year period 1917 to 1921, was 11.4 per 1,000. The following are the general mortality, infant mortality and birth rates for the six years, 1917-1922.

# Newark's Annual Death

(Rate per 1,000 Population)



Division of Vital Statistics, Dept. of Health, Newark, N. J.

The population rate for Newark in 1914 was 22.25 per 1,000 population, and the basis of the present graph is 100 per 1,000 population.



## DEPARTMENT OF PUBLIC AFFAIRS

	1922	1921	1920	1919	1918	1917
Death Rate . . . . .	12.1	11.2	13.4	12.5	19.7	15.3
Infant Mortality Rate. . . . .	74.8	71.5	84.7	76.2	104.7	87.8
Birth Rate . . . . .	25.4	27.5	28.3	25.7	27.0	29.1

## HIGH DEATH RATE IN FIRST HALF OF 1922

During the first half of the year, there were 2,950 deaths with an annual rate of 12.7 per 1,000. During this period there were 366 deaths more than for the first six months of 1921.

The City mortality for the second half of the year was unusually low and resulted in a much better rate than was anticipated from the progress of the first six months.

The mortality for the first half of the year was augmented by the prevalence of acute respiratory infections. The record for the latter half of the year, although good, was unable to quite counterbalance the bad start of the winter and early spring months. The following table shows the City death rate since 1894.

CRUDE DEATH RATES FOR NEWARK ACCORDING TO  
CENSUSES AND INTERCENSAL ESTIMATED INCREASES

(Rate per 1,000 Population)

Year	Population	No of Deaths	Death Rate
1894	203,923	4,543	22.28
1895	215,725	4,615	21.37
1896	225,000	4,716	20.95
1897	230,000	4,010	17.43
1898	235,000	4,303	18.31
1899	240,000	3,537	18.90
1900	246,070	3,066	20.34
1901	250,000	4,806	19.22
1902	255,000	4,943	19.35
1903	260,000	4,923	18.54
1904	272,000	5,378	19.77
1905	283,239	5,025	17.74
1906	290,000	5,551	19.14
1907	300,000	5,724	19.08
1908	310,000	5,207	17.17
1909	311,000	5,525	17.77
1910	347,466	5,764	16.64
1911	352,000	5,337	15.16
1912	370,000	5,423	14.65
1913	380,000	5,562	14.63
1914	395,000	5,805	14.70
1915	375,000	5,382	14.30
1916	385,000	6,387	16.50
1917	400,000	6,205	15.30
1918	430,000	8,483	19.72
1919	440,000	5,534	12.57
1920	414,216	5,551	13.40
1921	425,000	4,774	11.24
1922	432,000	5,209	12.06

## ANNUAL MORBIDITY AND MORTALITY RATES FOR 1922 IN A 1-5 OVER 100 000 POPULATION

The following table gives the general death rate together with the mortality rate for each of the 100 largest cities of the United States, having over 100,000 population.

[illegible]

Locality

Lat. Long.

Alt.

Wind

Temp.

Hum.

Clouds

Pressure

Barometer

Thermometer

Hygrometer

Barograph

Barograph

Barograph

Barograph

Barograph

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MORTALITY FROM ALL CAUSES OF DEATH BY WARDS  
FOR 1922(Rate per 1,000 Ward Estimated Population Based Upon U. S.  
Census of 1920)

	Estimated Population	Total Deaths	Rate per 1,000 Ward Population
Ward 1	31,374	30	10.9
Ward 2	17,732	22	12.5
Ward 3	3,833	11	11.2
Ward 4	1,974	16	14.3
Ward 5	2,743	31	14.6
Ward 6	21,112	20	10.4
Ward 7	27,022	28	12.6
Ward 8	32,387	35	12.5
Ward 9	3,161	37	10.4
Ward 10	23,713	27	1.9
Ward 11	2,811	27	12.7
Ward 12	26,148	28	10.8
Ward 13	40,015	40	19.0
Ward 14	37,631	37	9.9
Ward 15	17,005	26	12.5
Ward 16	57,435	31	3.4

## MORTALITY UNDER SPECIAL HEADINGS

1911-1922

	1922	1921	1920	1919	1918	1917	1916
Total all causes	5,209	4,773	5,551	5,534	8,483	6,205	6,357
Infantile Paralysis	1	4	7	2	6	11	57
Typhoid Fever	12	12	8	9	15	17	23
Malaria							
Smallpox							
Mumps	40	13	50	7	120	5	102
Scarlet Fever	11	25	12	12	11	3	7
Whooping Cough	38	25	56	4	54	60	25
Diphtheria	73	44	62	59	82	56	57
Influenza	57	18	222	27	1,387	24	45
Epidemic Meningitis (Cerebro Spinal)	16	11	16	22	45	43	22
Other Epidemic Diseases		1	1	2	1	4	1

Tuberculosis of Lungs (Consumption)	377	352	479	552	683	704	685
Tubercular Meningitis	31	33	34	41	61	42	61
Other Tuberculosis	20	21	36	44	54	44	36
Cancer, Malignant Tumors	379	408	368	398	331	365	355
Simple Meningitis	24	24	37	36	35	15	38
Apoplexy Softening of the Brain	346	315	297	307	310	356	313
Organic Heart Disease	640	510	492	529	672	599	495
Bronchitis	84	73	105	98	178	155	137
Pneumonia, Lobar	319	235	434	432	1,102	553	197
Pneumonia, Broncho	252	117	302	213	46	211	264
Other Respiratory Diseases	91	95	84	57	92	137	180
Diseases of the Stomach (Cholera Excepted)	63	46	45	53	71	66	64
Local Diseases (Under 5 Years)	187	210	214	295	331	315	264
Appendicitis and Typhilitis	81	65	60	54	64	51	67
Hemorrhage, Intestinal Obstruction	45	41	36	49	64	33	36
Cirrhosis of Liver	34	38	32	42	51	71	49
Bright's Disease and Nephritis	346	417	507	504	529	648	704
Diseases of Women (Not Cancer)	9	3	4	11	6	16	47
Puerperal Septicaemia	18	18	22	14	11	6	12
Other Puerperal Disease	40	56	45	42	42	23	14
Congenital Debility and Malformation	362	403	402	345	442	430	435
Old Age	46	28	34	34	27	16	85
Accident	277	241	278	304	389	286	303
Homicide	30	20	14	26	20	25	14
Suicide	54	68	47	56	50	64	55
Undeclared Causes	10	1	2	—	2	—	1
All Other Causes	816	713	664	659	640	621	476
Yearly death rate per 1,000	12.1	11.2	13.4	12.6	19.7	15.3	11.5

## INCREASED MORTALITY BY SPECIAL CAUSES.

The increase in the city mortality for the year was largely due to the excess deaths from respiratory infections, prin-



cipally influenza, measles and pneumonia. The following table gives the increased mortality as compared with 1921.

CAUSES OF DEATHS—	Year 1922	Year 1921	Increased Deaths
Measles	46	13	33
Whooping Cough	28	25	3
Diphtheria	73	44	29
Influenza	57	18	39
Epidemic Meningitis	16	11	5
Lobar Pneumonia	319	235	84
Broncho Pneumonia	252	147	105
Organic Heart Disease	640	510	130
Apoplexy	346	315	31
Accidents	257	241	16

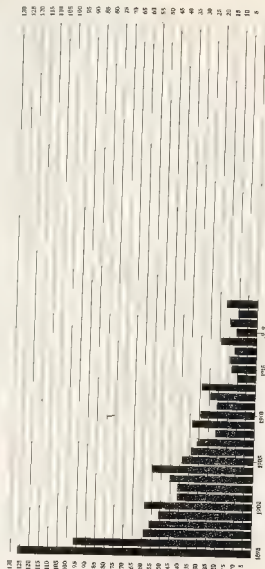
#### MEASLES AND PNEUMONIA

Under the head of measles and pneumonia there were 221 more deaths reported than in the previous year, constituting by far the largest proportion of the increase in deaths for the year. Measles is known to alternate every year, so that every other year is one of high prevalence. During the winter and early spring of 1922 measles with pneumonia was unusually prevalent and widespread. The reported cases of measles for the year amounted to 3,956, as compared with 1,339 for 1921. Of the 46 deaths from measles, 41 occurred under 5 years of age. A similar high mortality for the young was seen in the deaths from broncho pneumonia, among which more than half were under 5 years of age.

#### DIPHTHERIA

There were 73 deaths reported from diphtheria, an increase of 29 more than the previous year. This amounts to a rate of 16.9 per 100,000 population, which is higher than for any year since 1918. This high fatality from the disease is unusual and its reason is not borne out by any epidemic prevalence. Indeed there were only 771 cases reported in the city

(Rate per 100,000 Population)



Vital Statistics Division, Dept. of Health

The deaths in Diphtheria in New York City, 1895, previous to the introduction of the present Antitoxin amounted 126.6 per 100,000. The death rate in 1901 was 10.4 per 100,000, representing a saving of 46.4 children's lives each year on present population.

during the year as compared with 1,059 for 1921. Forty-one deaths occurred under 5 years, 30 from 5 to 14 years and 2 deaths from 25 to 44 years. It is significant that nearly all the deaths occurred during the pre-school and school age. No better argument can be found for the Schick test and the toxin-antitoxin immunization than the so evident fatality of the disease at this age period. The high virulence of diphtheria during the year is, of course, to be attributed partly to the measles prevalence during the early months, inasmuch as 52 of the 73 deaths from the disease occurred during the first half of the year. In all respiratory epidemics the presence of diphtheria is always to be suspected, as it finds local resistance of tonsils and throat so lowered that infection more readily occurs. The routine throat swab is a precaution not to be neglected in families where measles occurs, or for children who have been exposed to infection.

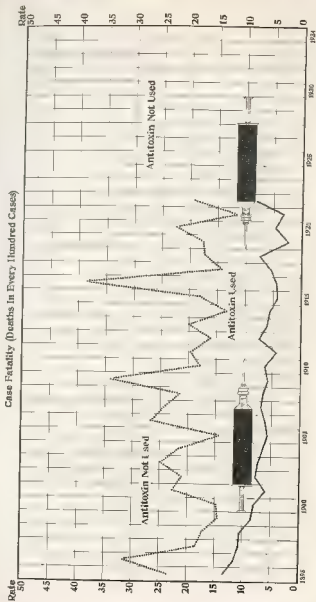
#### INFLUENZA

There were 57 deaths from influenza as compared with 18 for the previous year. The number of reported cases of the disease was 2,368, as compared with 356 for 1921. The low case mortality of two per cent. would indicate that it is questionable whether the influenza so reported is the true Spanish influenza of 1918 and 1920 being rather our old familiar friend "Grippe." Among the 57 deaths from influenza 11 were under 5 years of age, 31 deaths occurred between the ages of 25 to 64 years.

#### ORGANIC HEART DISEASE

Prominent in the increased fatality is that from organic heart disease. There were 640 deaths recorded under this head an increase of 130 more than for 1921, the largest increase from any one cause of death during the year. Among these 336 were males and 304 females. The greater proportion of this fatality was at the later periods of life, 240 being reported at the age period of 45 to 64 years and 241 at 65 years and over or 75 per cent. of these deaths occurred at 45

# As The Result Of Antitoxin



Division of Vital Statistics, Dept. of Health, Newark, N.J.

A record of 622 Newark cases not treated with Diphtheria antitoxin showed a death rate of 23 per cent as compared with a 5 per cent case fatality where Antitoxin was used

years and beyond. The increasing number of deaths from organic heart disease is a matter for concern and a distinct menace to the community. It is evidently becoming a much more common cause of death at middle life and indicates a serious need for greater physical care. Such care can be fostered by a wider knowledge and practice of personal hygiene. How far this cause of death is an accurate diagnosis cannot of course be gauged for few of these cases come to autopsy.

It is significant, however, that in hospital statistics this cause of death is not so prominent as in city mortality figures. It is possible that heart disease is a much commoner ailment than is generally recognized but whether there are predisposing causes in every day existence favorable to its development has not as yet been definitely shown.

#### APoplexy

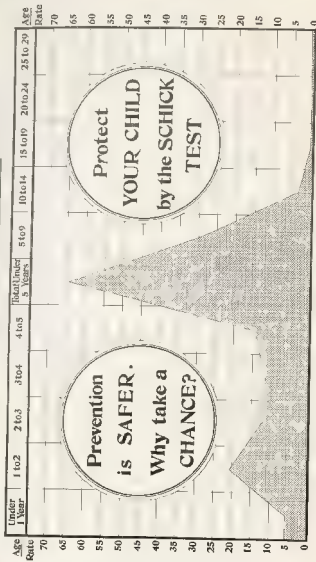
There were 346 deaths from apoplexy, 31 more than for the previous year. Deaths from this cause were more frequent among women, 195, to 151 for men. Apoplexy as a cause of death is almost wholly confined to middle and late life; 320 deaths or 92 per cent. were over 45 years of age.

#### Accidents

During the year 1922 there were 257 deaths reported due to accident. Among these, automobiles were responsible for 78, falls 38, burns and scalds 33, drowning 17, poisoning (alcohol, 17, illuminating gas 15, steam railroad 10. In the total deaths due to accident, 202 were males and 55 females. The age incidence varies for each class of accident. In the case of burns and scalds nearly half were under 5 years. In the case of falls, all but five were over twenty years. All the alcohol poisonings were over 20 years of age. The increasing number of deaths by automobiles is a serious element in our community life. In 1905 Newark had no automobile accidents, but in 1922 there were 78 of these truly preventable causes of death. The following table gives deaths due to accident, by age and sex:

# Newark Deaths From Diphtheria By Age

PERCENTAGE DISTRIBUTION BY AGE PERIODS

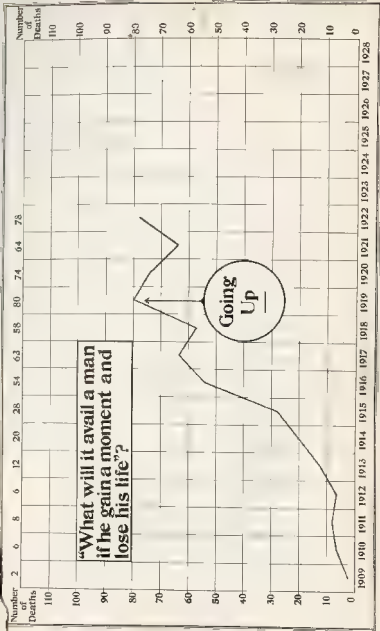


Division of Vital Statistics, Dept. of Health, Newark, N.J.

The percentage of diphtheria deaths is highest in the youngest age groups. The Schick test is a simple and effective method of preventing diphtheria in children under 15 years of age.

DEATHS FROM ACCIDENTS FOR YEAR 1922

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Vital Statistics Division, Dept. of Health, Newark, N.J.

The high water mark in fatal accidents in Newark was 89 fatalities in 1919 - he lessened mortality of the two following years has not been met since 1922



## DEPARTMENT OF PUBLIC AFFAIRS

## DECREASED MORTALITY UNDER SPECIAL CAUSES

There was during the year a marked decrease in the number of deaths from certain causes.

CAUSE OF DEATH	1921	1922	Percentages
Infantile Paralysis	1	4	3
Scarlet Fever	17	11	10
Pneumonia	37	32	15
Pneumonia	78	408	24
Cancer	147	14	23
Diarrhoea (under 5 years)	34	47	74
Biliary Disease	5	4	10
Puerperal Deaths			

## SCARLET FEVER

Since the year 1917 the prevalence and mortality from scarlet fever has been increasing year by year until the disease apparently reached a peak with a mortality of 2.9 per 100,000 of the population in 1921. It is, therefore, satisfactory to record a lower fatality for the disease during 1922. A remarkable character of the cases has been, however, the extreme mildness of the attack with a case fatality much lower than that recorded for historic outbreaks of this epidemic disease. During the year there were 1,597 cases of scarlet fever reported, making a case mortality of less than one per cent, very significant of the low virulence of this special type of the disease.

## TYPHOID FEVER

There were 12 deaths from typhoid fever during the year, making a rate of 2.8 per 100,000 population, being the same rate as the previous year. There were 118 cases reported in the city, so that apparently the reporting of the disease was of a satisfactory character. The typhoid rate was considerably higher by reason of an outbreak due to the sale of city of infected milk from a farm upon which a known

(Rate per 100,000 Population)



Vital Statistic Division, Dept. of Health

Scarlet Fever, formerly prominent as a cause of death among children, caused 33.8 deaths per 100,000 population in Newark in 1894; reduced to 3.5 in 1922. In other words, on the present population 121 fewer children die from this cause each year.

typhoid fever carrier was discovered to be working under an assumed name.

### DEATHS FROM TYPHOID FEVER PER 100,000 POPULATION

	1922	1921	1920	1919	Average 1916- 1920	Average 1911- 1915	Average 1906- 1910
Newark, N. J.	2.8	2.8	1.9	2.1	3.3	6.8	14.6
Seattle, Wash.	2.8	2.1	1.9	2.3	2.9	5.7	25.2
Milwaukee, Wis.	2.5	1.9	2.2	3.5	6.5	13.6	27.0
Minneapolis, Minn.	1.7	0.8	2.0	3.1	5.0	10.6	32.1
Cincinnati, O.	3.0	3.5	3.0	2.6	3.4	7.8	30.1
Indianapolis, Ind.	5.4	7.1	3.8	4.7	10.3	20.5	30.4
Washington, D. C.	5.1	6.4	6.5	3.7	9.5	17.2	36.7
New Orleans, La.	10.3	9.4	7.4	13.7	17.5	20.9	35.6
Kansas City, Mo.	4.9	11.3	7.6	11.2	10.6	16.2	35.6

### DEATHS FROM SCARLET FEVER, TYPHOID FEVER AND DIPHTHERIA PER 100,000 POPULATION, 1894-1922

Year	Scarlet Fever	Typhoid Fever	Diphtheria
1894	33.8	16.7	
1895	16.2	23.2	126.6
1896	7.6	20.9	96.9
1897	23.5	14.3	59.6
1898	6.4	17.4	56.6
1899	14.2	25.0	51.7
1900	22.4	20.3	58.1
1901		22.8	41.2
1902	18.0	18.4	41.2
1903	26.7	23.7	45.1
1904	44.1	14.7	77.1
1905	15.9	14.1	38.8
1906	11.7	17.2	34.1
1907	13.7	23.0	31.7
1908	29.2	11.5	21.6
1909	22.5	12.5	33.8
1910	11.2	12.7	29.9
1911	6.0	10.5	21.0
1912	3.0	7.0	24.6
1913	6.9	7.9	28.0
1914	6.8	6.6	10.4

1915	1.6	2.9	13.1
1916	1.8	6.0	14.8
1917	0.7	4.2	12.3
1918	2.6	3.5	19.1
1919	2.7	2.0	11.3
1920	2.9	1.9	14.9
1921	5.9	2.8	10.4
1922	3.5	2.8	16.9

## LOWEST MORTALITY FOR TUBERCULOSIS ON RECORD

The deaths from Tuberculosis (all forms) numbered 428, this being a decrease of 18 deaths from that recorded in 1921. This establishes a rate of 99.1 per 100,000 population, being the lowest rate on record, it being 5.8 lower than the rate for 1921, which year was the lowest record since 1894 and 31.3 lower than the year of 1920:

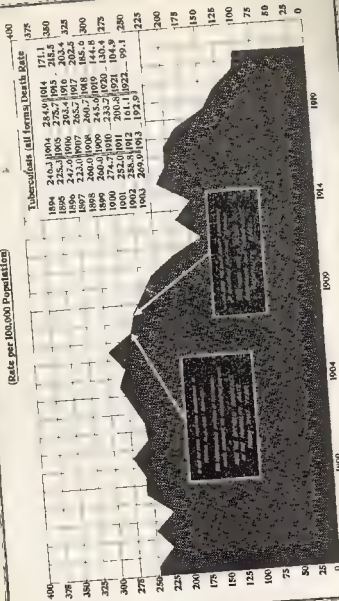
## TUBERCULOSIS (ALL FORMS) DEATH RATE

(Rate per 100,000 Population, 1894-1922)

Year	Rate	Year	Rate	Year	Rate
1894	246.3	1904	284.9	1914	171.1
1895	225.3	1905	275.7	1915	215.5
1896	247.6	1906	293.4	1916	203.4
1897	223.0	1907	265.7	1917	202.5
1898	260.0	1908	260.7	1918	185.6
1899	260.0	1909	245.6	1919	144.8
1900	274.7	1910	233.7	1920	130.4
1901	252.0	1911	200.8	1921	104.9
1902	258.8	1912	161.1	1922	99.1
1903	269.9	1913	192.9		

# Mortality from Tuberculosis, Newark, N.J.

(Rate per 100,000 Population)



TOTAL DEATHS AND DEATH RATES PER THOUSAND,  
AND DEATHS AND DEATH RATES FROM PULMONARY  
AND OTHER FORMS OF TUBERCULOSIS SINCE 1900

YEAR	Total Deaths	Total Death Rate Per M	Total Deaths Pulmonary Tuberc.	Death Rate Pulmonary Tuberc. Per M	Total Deaths All Forms Tuberc.	Death Rate All Forms Tuberc. Per M
1900	5,006	10.14	603	2.48	676	2.74
1901	4,806	10.3	581	2.32	640	2.57
1902	4,953	10.38	556	2.18	660	2.59
1903	4,923	12.50	626	2.35	718	2.70
1904	5,378	10.77	651	2.39	775	2.84
1905	5,025	12.74	647	2.28	781	2.75
1906	5,851	19.14	685	2.36	831	2.91
1907	5,724	19.08	685	2.28	797	2.65
1908	5,207	17.07	628	2.05	795	2.60
1909	5,520	17.37	596	1.92	764	2.45
1910	5,784	16.64	681	1.96	812	2.40
1911	5,337	18.16	584	1.66	707	2.01
1912	5,422	14.55	506	1.37	596	1.61
1913	5,562	14.63	631	1.66	733	1.94
1914	5,909	14.70	583	1.47	676	1.71
1915	5,382	14.30	687	1.83	808	2.12
1916	6,347	16.50	685	1.77	783	2.13
1917	6,205	15.30	704	1.74	820	2.07
1918	5,483	19.72	683	1.59	758	1.86
1919	5,534	12.57	552	1.26	637	1.45
1920	5,551	13.40	470	1.13	540	1.30
1921	4,774	11.23	792	0.92	446	1.15
1922	5,809	12.06	577	0.87	478	0.99

## CANCER

One of the most satisfactory records for 1922 is the unusual lowered mortality for cancer, the 379 deaths recorded being 29 less than for the previous year. The lessened fatality has been consistently distributed over the whole year, the first half of which had eleven fewer deaths from cancer than for the corresponding period of 1921. In few diseases affecting both sexes is there so much preference shown for females as in cancer, 209 deaths out of the 379 being in women. The mortality from the disease is confined principally to the middle and late age periods; over 80 per cent. of all deaths from this cause were over 45 years of age.

## BRIGHT'S DISEASE

The greatest decrease in mortality under special heads is that under Bright's disease or Nephritis. There were 346 deaths from this cause being 71 less deaths than in 1921. It is natural to look for a greatly lessened mortality from Bright's disease, which is so intimately related to intemperance and its resulting exposure. This assumption is borne out by the lessened mortality during the age period 25 to 44 years, there being 32 less deaths at this age than in the previous year.

## FEWER PUERPERAL DEATHS

Deaths of mothers at childbirth numbered 58 as compared with 74 for 1921. There has been for some years a decided decrease observed in mortality from puerperal disease in national as well as local records. The reason for this has not been definitely ascertained but must have been dependent very largely upon lack of prenatal as well as natal care. It is, therefore, a cause for congratulation that this truly preventable mortality is showing some tendency to decrease. Improvement in our maternal mortality must depend upon the education of the future mothers as well as the recognition of the vital need for prenatal medical supervision and care.

## PERCENTAGE DISTRIBUTION BY AGE PERIODS IN VARIOUS CAUSES OF DEATHS 1922

CAUSES	TOTAL DEATHS		UNDER 5 YEARS		5-14 YEARS		15-64 YEARS		65 YEARS AND OVER		Percentage of Total Deaths
	Deaths	Per Cent	Deaths		Deaths		Deaths		Deaths		
			No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
Measles ..	46	100.00	4	89.2	5	100.0	1	3.1	1	10.0	0.9
Whooping Cough	28	100.00	27	96.4			2	2.7			0.7
Diphtheria	13	100.00	43	56.2	50	11.1					1.4
Influenza	57	100.00	22	19.3	1	1.8	18	31.6	3	10.8	1.1
Pneumonia (A. form)	571	100.00	333	58.8	45	9.0	1	2.4	12	23.3	1.6
Brucellosis	84	100.00	5	6.8	3	3.6	7	8.4	8	9.5	0.6
Tuberculosis of Lungs	3,77	100.00	6	6.6	27	20.0	23	48.9	113	29.7	2.9
Diarrhoeal Diseases (Under 5 years)	18	100.00	18	100.0							3.0
Constitutional Disease and Malformations	467	100.00	367	100.0							6.3
Pericardial Disease	346	100.00	14	4.0	20	5.8	38	11.0	136	37.3	6.6
Apoplexy	546	100.00	—	—	2	0.6	24	6.9	19	3.2	6.6
Organic Heart Disease	640	100.00	19	3.0	44	6.8	46	13.6	211	37.7	12.3
Cancer	376	100.00	—	—	5	1.3	94	15.9	201	53.1	4.4
Accidents	957	100.00	23	9.5	22	28.2	87	31.0	33	12.9	4.9



# Mortality From All Causes Of Death By Wards In Newark, N.J. For The Year 1922

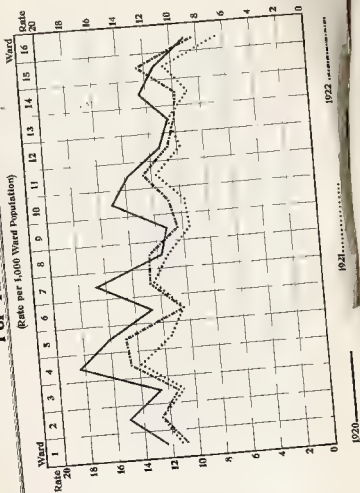


TABLE 1921-1922 DEATHS AND CAUSES AS COMPARED WITH FIVE YEAR PERIOD, 1917-1921

The following table shows the total number of deaths from each given cause together with the percentage of each cause contributed to the total:

CAUSE OF DEATH	Number of Deaths 1922	Percentage of Total	Number of Deaths 1921	Percentage Total	Number of Deaths 1917-1921	Percentage Total
Total All Causes.....	5,209	100.00	4,776	100.00	31,549	100.00
Infantile Paralysis .....	1	0.1	4	0.10	30	0.1
Typhoid Fever .....	12	0.2	12	0.30	61	0.2
All other						
Scarlet Fever .....	46	0.9	13	0.30	195	0.6
Whooping Cough .....	15	0.3	25	0.50	63	0.2
Diphtheria .....	28	0.5	25	0.50	199	0.7
Influenza .....	73	1.4	44	0.90	288	0.9
Epidemic Meningitis .....	57	1.1	18	0.40	1,918	6.3
Cerebro Spinal .....	16	0.3	11	0.20	137	0.4
Other Epidemic Diseases .....	..	..	1	0.02	9	0.1
Tuberculosis of Lungs .....	377	7.2	392	8.20	2,801	9.2
Tuberculous Meningitis .....	31	0.6	33	0.70	211	0.7
Other Tuberculosis .....	20	0.4	21	0.40	229	0.7
Cancer, Malignant Tumor .....	379	7.3	408	8.50	1,826	6.0
Simple Meningitis .....	24	0.5	24	0.50	173	0.6
Apoplexy .....	346	6.6	315	6.60	1,594	5.2
Organic Heart Disease .....	44	12.3	510	10.70	2,802	9.2
Bronchitis .....	84	1.6	73	1.50	609	2.0
Pneumonia (Lobar) .....	416	6.1	235	4.90	2,703	8.8
Pneumonia (Bronchic) .....	252	4.8	147	3.10	1,342	4.4
Other Respiratory Diseases .....	61	1.2	95	2.00	465	1.5
Diseases of Stomach .....						
Cancer excepted .....	62	1.2	46	1.00	281	0.9
Acute Diseases .....						
Under 5 years .....	187	3.6	210	4.40	1,395	4.6
Typhoid and Typh .....						
Typh .....	81	1.6	65	1.40	294	1.0
Intestinal Obstruction .....	45	0.9	41	0.90	223	0.7
Hepatitis of Liver .....	34	0.7	38	0.80	234	0.8

## DEPARTMENT OF PUBLIC AFFAIRS

CAUSE OF DEATH	Number of Deaths 1921	Per Cent. of Total	Number of Deaths 1921	Per Cent. of Total	Number of Deaths 1921	Per Cent. of Total
Bright's Disease and Nephritis	340	5.6	417	8.70	2755	9.0
Diseases of Women (not Cancer)	9	0.2	3	0.06	4	0.1
Puerperal Septicaemia	18	0.3	18	0.40	71	0.2
Other Puerperal Diseases	40	0.8	56	1.20	208	0.7
Congenital Deformity and Malformation	362	6.9	403	8.40	2,912	6.6
Old Age	46	0.9	28	0.60	177	0.6
Accident	257	4.9	241	5.00	1,518	4.9
Homicide	30	0.6	20	0.40	105	0.3
Suicide	54	1.0	68	1.40	283	0.9
Undefined Causes	10	0.2	1	0.02	5	0.1
All Other Causes	816	15.7	715	15.00	3,270	10.8

MORTALITY FROM TUBERCULOSIS (ALL FORMS), IN  
SIXTY-FOUR AMERICAN CITIES

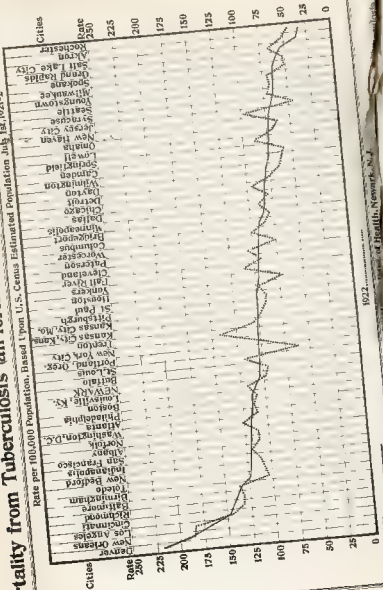
(Rate per 100,000 Population)

The following death rates are based upon the United States Bureau of Census estimated population July 1, 1922.

City	Population	Deaths	Rate
Rochester, N. Y.	311,548	143	45.9
Syracuse, N. Y.	181,012	83	45.9
Spokane, Wash.	104,445	54	51.7
Grand Rapids, Mich.	143,372	75	52.3
Akron, O.	208,435	109	52.3
Springfield, Mass.	140,652	83	59.3
Portland, Me.	114,717	70	61.2
Providence, R. I.	269,240	169	62.3
Camden, N. J.	121,915	77	63.2
New Haven, Conn.	169,987	109	64.1
Wilmington, Del.	115,568	77	66.6
Youngstown, O.	144,970	9	68.3
Salt Lake City, Utah	123,918	85	68.3
Oakland, Cal.	233,279	166	71.2
Omaha, Neb.	206,739	144	71.2
Milwaukee, Wis.	476,633	264	71.7
Seattle, Wash.	315,312	227	72.0
Yonkers, N. Y.	106,422	76	71.1
Worcester, Mass.	188,446		75.9
Cleveland, O.	161,824		76.6
Chicago, Ill.	2,833,288	2,212	78.1
Minneapolis, Minn.	401,970	313	78.1
Pittsburgh, Pa.	109,528	91	83.1
Bridgport, Conn.	143,555	124	86.4
Lowell, Mass.	114,423	102	89.1
St. Paul, Minn.	239,836	216	90.1
Dallas, Tex.	171,974	156	90.7
Pittsburgh, Pa.	667,962	560	92.1
Cleveland, O.	854,565	795	93.0
Albany, N. Y.	528,163	502	95.0
Detroit, Mich.	993,678	950	95.6
Key City, N. J.	335,911	297	97.1
San Antonio, Tex.	343,988	336	97.7
Houston, Tex.	150,067	148	98.6
NEWARK, N. J.	431,792	428	99.1

# Mortality from Tuberculosis all forms in Fifty-seven Cities, 1922

Rate per 100,000 Population, Based upon U.S. Census Estimated Population July 1st, 1921-2



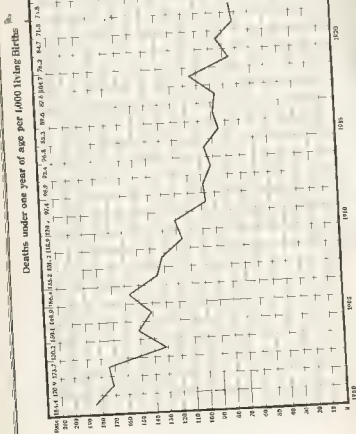
City	Population	Deaths	Rate
New York City, N. Y.	2,837,740	2752	99.2
Columbus, O.	153,455	152	99.4
Trenton, N. J.	2,717	261	133.9
Paterson, N. J.	128,841	145	104.7
New Bedford, Conn.	127,547	136	106.6
Kearney, Neb.	113,841	122	107.2
Lowell, Mass.	74,017	841	113.1
Atlanta, Ga.	230,047	245	111.4
Albany, N. Y.	116,223	131	111.9
Fall River, Mass.	134,760	136	112.2
Indianapolis, Ind.	333,257	376	112.8
Norfolk, Va.	124,215	141	114.9
Philadelphia, Pa.	1,864,500	2112	114.1
St. Louis, Mo.	795,008	241	118.4
Louisville, Ky.	256,877	305	118.7
Cambridge, Mass.	110,644	132	119.6
San Francisco, Cal.	529,792	137	120.6
Washington, D. C.	454,626	549	125.3
Baltimore, Md.	762,222	1067	139.1
Richmond, Va.	178,365	237	132.9
Birmingham, Ala.	191,617	261	136.2
Trenton, N. J.	125,075	178	142.3
Providence, R. I.	241,011	349	144.8
Cincinnati, O.	404,865	588	145.2
Nashville, Tenn.	120,332	185	153.7
Memphis, Tenn.	167,862	261	155.6
Los Angeles, Cal.	614,866	1,176	184.3
New Orleans, La.	392,616	742	186.7
Denver, Co.	267,591	585	218.6

## INFANT MORTALITY RATE

74.8 PER 1,000 BIRTHS

The deaths under one year of age numbered 822, making an infant mortality rate of 74.8 per thousand births reported. This rate is based upon the actual recorded births in the city. The infant mortality rate for the year is second lowest being lower than 1921, which year had had the lowest rate on record.

# Newark's Infant Mortality Rates



## INFANT MORTALITY RATE PER 1,000 BIRTHS

Year	Rate	Year	Rate
1910	184.4	1911	188.8
1911	170.6	1912	182.4
1912	173.7	1913	188.8
1913	130.7	1914	185.5
1914	150.1	1915	180.0
1915	140.8	1916	187.3
1916	125.4	1917	164.7
1917	135.2	1918	70.3
1918	131.5	1919	84.7
1919	118.0	1920	71.5
1920	125.0	1921	74.8
1921	97.4	1922	

The average infant mortality rate for the five year period 1917-1921 was 85.0 per thousand births recorded. The prevalence of measles and influenza during the early part of 1922 was in a measure responsible for the increase in the infant mortality rate for the whole year. Had it not been for the number of deaths under one year during the first three months of 1922, this year would have been a remarkable one from the point of view of low infant mortality, inasmuch as the deaths at this age period during the summer and fall months were unusually few.

The decreased number of births during the year, however, had the largest material effect in raising the infant mortality rate for this year. The following table indicates the infant mortality since last spring as compared with the average for the five year period:

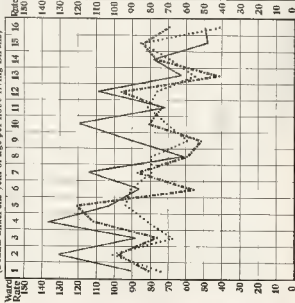


# Infant Mortality and Birth Rates by Wards in Newark, N.J.

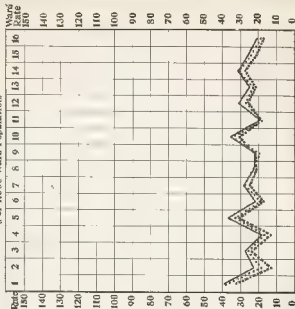
1920

1922

Infant Mortality Rate  
(Deaths under one year of age per 1,000 living births)



Birth Rate  
(Per 1,000 Ward Population)



Deaths Under 12 Months, 1922		Average Number of Deaths per Month for 1917-1921	
January	88	January	88
February	93	February	81
March	71	March	96
April	69	April	74
May	47	May	76
June	61	June	60
July	65	July	98
August	56	August	101
September	57	September	78
October	57	October	81
November	65	November	73
December	74	December	82
Total	822	Total	990

## INFANT MORTALITY RATES BY WARDS FOR 1922

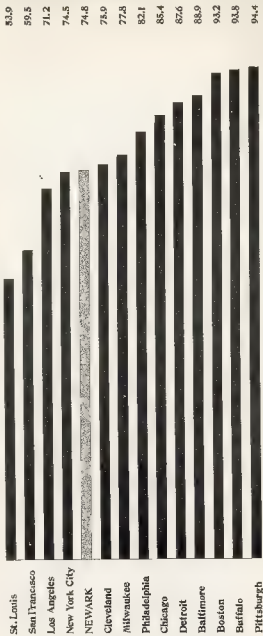
(Deaths Under 1 Year of Age per 1,000 Living Births)

Ward	Total Births Reported	Deaths under 1 Year	Rate per 1,000 Births Reported	Estimated Ward Population	Rate per 1,000 Ward Population
1	1,044	84	80.5	31,314	2.7
2	234	23	98.3	17,732	1.3
3	911	70	76.8	36,833	1.9
4	179	20	111.7	12,974	1.5
5	682	83	121.7	21,743	3.8
6	377	21	55.7	21,162	1.0
7	448	39	87.1	17,824	2.2
8	693	41	59.2	32,387	1.3
9	790	41	51.9	34,161	1.1
10	724	58	80.1	23,713	2.4
11	438	30	73.5	21,861	1.4
12	694	67	96.5	26,498	2.5
13	865	39	45.1	40,015	1.0
14	1,047	81	77.4	37,635	2.2
15	366	31	84.7	16,685	1.9
16	648	45	69.4	37,435	1.2

Non-resident Births 883

# **Infant Mortality Rates of the 14 Largest Cities in the United States, 1922**

Deaths under one year of age per 1,000 living Births



**NEWARK one of the SAFEST places for BABIES**

# INFANT MORTALITY RATES FOR 1922 IN CITIES OVER 100,000 POPULATION

(Deaths under One Year of Age per 1,000 Living Births)

Cities	Total Births for 1922	Deaths under One Year	Rate per Thousand
Seattle, Wash.	5,115	261	48.2
Minneapolis, Minn.	9,543	506	53.1
St. Paul, Minn.	15,351	838	53.9
Louisville, Ky.	5,337	284	53.4
Chicago, Ill.	7,441	398	53.6
Camden, N. J.	3,149	184	58.4
Portland, Ore.	5,214	307	59.1
Grand Rapids, Mich.	3,777	164	51.2
San Francisco, Cal.	8,600	515	59.8
Cincinnati, Ohio	4,853	311	62.2
Okla. City	4,011	257	63.3
San Antonio, Tex.	3,553	226	63.6
St. Paul, Minn.	5,000	367	73.4
Indianapolis, Ind.	3,400	251	73.8
Los Angeles, Cal.	13,800	991	71.2
Cleveland, Ohio	7,381	527	71.3
San Francisco, Cal.	4,411	326	73.6
Spokane, Wash.	2,400	180	75.0
San Francisco, Cal.	3,176	234	73.7
New York City	12,084	895	74.5
New Haven, Conn.	3,500	264	75.4
Newark, N. J.	10,003	822	82.2
Los Angeles, Cal.	5,031	360	71.5
Cleveland, Ohio	18,040	1,437	79.7
Los Angeles, Cal.	2,027	154	76.0
San Francisco, Cal.	6,371	448	70.3
Indianapolis, Ind.	6,646	509	76.6
Paterson, N. J.	3,165	240	75.8
Milwaukee, Wis.	10,562	822	77.8
Albany, N. Y.	2,454	193	78.6
Norfolk, Va.	2,941	234	79.6
Jersey City, N. J.	7,721	619	80.2
Worcester, Mass.	4,449	358	80.5
New Orleans, La.	10,104	825	81.2

Cities	Total Births for 1922	Deaths under One Year	Rate per Thousand
Philadelphia, Pa.	40,665	3,337	82.1
Columbus, O.	5,110	421	82.4
Kansas City, Kans.	2,746	227	82.7
Yonkers, N. Y.	2,387	198	82.9
Washington, D. C.	9,121	771	84.5
Denver, Col.	4,965	421	84.8
Dallas, Tex.	4,063	346	85.2
Chicago, Ill.	56,724	4,841	85.4
Detroit, Mich.	25,910	2,260	87.2
Richmond, Va.	4,123	367	88.5
Syracuse, N. Y.	4,027	358	88.9
Baltimore, Md.	17,845	1,557	88.9
Atlanta, Ga.	4,933	443	89.4
Wilmington, Del.	2,621	241	91.7
Houston, Tex.	2,922	258	91.7
Boston, Mass.	18,250	1,701	93.2
Buffalo, N. Y.	12,114	1,141	93.8
Pittsburgh, Pa.	14,964	1,412	94.4
Nashville, Tenn.	2,707	258	95.3
Lowell, Mass.	*3,000	288	96.0
Kansas City, Mo.	6,675	648	97.1
New Bedford, Mass.	3,408	345	101.2
Memphis, Tenn.	3,180	330	106.0
Trenton, N. J.	3,104	334	117.6
Rochester, N. Y.	6,486	752	118.9
Fall River, Mass.	3,718	448	120.7
Youngstown, O.	1,853	251	135.5

\* Estimated Births

## BIRTH RATE.

25.4 PER 1,000

The total number of births recorded during 1922 in New York was 10,993, making an annual rate of 25.4 per 1,000 population.

The births for 1922 were 712 less than for 1921 and the rate is consequently 2.1 points less than for the previous year, and 2.3 points less than the average birth rate for the five-year period 1917-1921.

The average yearly birth rate for the twenty-year period, 1900 to 1920 was 27.7 per 1,000 population. The causes for making lowered birth rates are associated usually with racial as well as national changes in populations.

In recent years it has been observed that the lowering of the birth rate has accompanied improved social, as well as economic, conditions of most civilized peoples. How far the lessened births are the result of unsuitable housing facilities in cities, resulting in the driving into the more rural districts of young married people, must be left to conjecture. One very definite factor in the decreased birth rate is the restriction upon immigration at present in force.

In former years the foreign born parents have always been responsible for a greater proportion of births than the parents of native or American born stock.

## CLASSIFICATION OF BIRTHS IN 1922

	Rate per 1,000 Population
Males	13.0
Females	12.4
Totals	25.4
White	24.6
Colored	1.4
Yellow	6
Illegitimate	0.3
Still Births	1.0

## YEARLY BIRTH RATE PER THOUSAND POPULATION

1922	25.4
1910	29.6
1909	30.8
1908	29.2
1907	27.9
1906	26.0
1905	25.1
1904	25.8
1903	26.4
1902	25.2
1901	24.0
1900	24.8

## BIRTH RATES BY WARDS FOR 1922

(Rate per 1,000 Ward Estimated Population, Based Upon United States Census of 1920)

Ward	Estimated Population	Total Births Reported	Rate per 1,000 Ward Population
1	31,314	1,044	33.3
2	17,732	234	13.2
3	36,833	911	24.7
4	12,974	179	13.8
5	17,743	682	31.4
6	21,192	377	17.8
7	17,822	448	25.1
8	32,387	693	21.4
9	36,161	790	21.8
10	23,713	724	30.5
11	21,861	408	18.7
12	26,498	964	26.2
13	40,015	865	21.6
14	37,635	1,047	27.8
15	16,685	366	21.9
1	3,445	648	17.3

Non-resident Births - 883.

## BIRTHS AND DEATHS AMONG COLORED POPULATION

There were 436 deaths among an estimated colored population of 17,500, making a mortality rate of 24.9 per 1,000 for these people, and only a decrease of three tenths of a point below the rate for 1921. The rate for 1922 is 12.8 per thousand higher than the general death rate for the city. The most common cause of death was pneumonia, 77 deaths; tuberculosis of lungs being second with 58 deaths. Deaths from congenital debility numbered 38 and Bright's disease 20.

Total number of colored births	611
Total number of colored deaths under one year	80
Colored infant mortality rate	140.8
Total number of colored deaths under one month	39
Colored infant mortality rate (deaths under one month)	63.8

There were 74 deaths among colored people from tuberculosis (all forms) for the year of 1922, making a death rate of 422.9 per 100,000, based upon an estimated colored population of 17,500. This rate is 74.1 points lower than 1921. The tuberculosis death rate for the entire city for 1922 was 99.1, which proves that tuberculosis among colored people is a very serious problem.

#### EPIDEMIC DISEASES IN 1922

In few years has there been experienced in the city such an unusual prevalence of epidemic diseases as was recorded during the first half of 1922. The number of cases of contagious disease reported during the year was 19,559 as compared with 15,895 for the previous year. This increase was in the greater part due to measles and influenza of which there were 6,834 cases reported. The following table shows the increases in reportable diseases for 1922 as compared with 1921.

Disease	1922	1921
Measles	3,956	1,339
Influenza	2,878	376
Broncho-pneumonia	1,292	618
Whooping Cough	21	2,237
Typhoid Fever	117	74

#### MEASLES

It is our experience with measles that it will tend to skip a year, making an interval between two years of high measles frequency. Although the disease is commonest during the winter the peak of prevalence may be early or late. It is seldom, however, that the highest prevalence of measles is continued into the early summer as was the case during 1922, when the greatest number reported during any one week was that of the first week in June, with a record of 241 cases. In spite of placarding and quarantine, measles



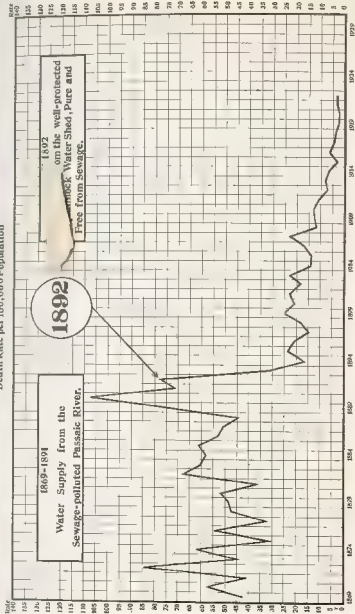
spreads into every quarter of the city where children under 5 years are present. The reason for this is, of course, due to the character of the disease itself, which in its early stages resembles an ordinary cold which, however, is the contagious stage. In this way children are exposed to infection before the true character of the malady is recognized. The cases reported were distributed in every ward of the city so that apparently susceptible children were widely present. The control of the disease is almost wholly in the hands of the parent and family. If children with colds and coryza were kept at home from school and public meeting places, other children would be saved from exposure. The general attitude also that the child must get it sooner or later is not helpful in the control of measles. The possibility of immunization of children against measles by the injection of normal house serum is being investigated in Italy. Certain it is that the future control of the disease will depend upon the development of some simple vaccine or serum treatment whereby the extreme susceptibility of children around two years of age who furnish the bulk of the victims may be definitely eradicated.

#### INFLUENZA

The peak of the influenza prevalence was in February, 1922, during which month no fewer than 2,093 cases were reported, out of 2,878 reported for the whole year, which is nearly 73% of the total. There is a considerable increase over the 356 cases reported for the previous year. The fatalities, however, attributed to influenza numbered 57, making an actual case fatality of a little over 2%. This would indicate that the influenza of 1922 was not of the same type of violence as that of former visitation. It is probable also that a great number of cases of common cold were included in the reported cases. The type of the disease was much milder, and the broncho pneumonia which arose as

# Remarkable Decrease in the Last Few Years

Death Rate per 100,000 Population



Division of Vital Statistics, Dept. of Health, Newark, New Jersey

A pure water supply to Newark has reduced the annual mortality from 1,000 per 100,000 population in 1892 to less than 3 per 1,000,000 in 1929.

a complication seldom compared with the extremely rapid fatal form associated with the influenza of 1918.

#### TYPHOID FEVER

The number of cases of typhoid reported in the city during 1922 was 117, as compared with 74 in 1921. From the records of other states there is apparently a country-wide tendency to increase in the typhoid fever prevalence. This has been noticeable in the rural as well as the city areas. Since the low mark of typhoid mortality in Newark of 1.9 per 100,000 population during 1920, there has been a continuous rise in the typhoid rate in recent years. The spread of this truly preventable disease is aided by the inability of many people to regard it as contagious. It is, however, highly so, and frequently runs through many members of one family. There is no disease with so high an infective rate for the attending physician and the nurse as is the case with typhoid fever. The disease is highly communicable, and as a contagious disease, has no place in the wards of a general hospital.

Thirty-five of the reported cases and three deaths were traced to a milk supply from a dairy where, upon investigation, a known typhoid fever carrier was found acting as a milker. More complete details concerning this typhoid carrier will be found in another section of this report.

#### CATARRHAL JAUNDICE

A number of cases of catarrhal jaundice were reported as occurring in the city during the year. As this coincided with complaints about the increased number of rats in the residential districts efforts were made to establish some casual relationship, but without any definite laboratory results. The occasion, however, was taken advantage of in inaugurating a campaign against the rat as a social menace and an economic bazar.



## ENCEPHALITIS LETHARGICA

There were ten cases of encephalitis reported in the city as compared with nine for the previous year. As, however, there were 22 deaths reported from this cause it is evident that diagnosis of this disease is not generally made by the physician until the case is sent to a hospital. Encephalitis is not, however, a reportable disease in this city so that the fatal cases are the only means in our possession of knowing its presence in the community. Among the fatal cases 14 were male and 8 female. In the age distribution four were under 5 years, two from 5 to 14 years four from 15 to 29 years, twelve over 30 years of age. This disease is becoming increasingly common as a cause of death, and every argument is in favor of making it a reportable disease.

The following table shows the decreased prevalence of contagious diseases for 1922:

Disease	1922	1921
Diphtheria	771	1,059
Scarlet Fever	1,503	1,948
Chicken-pox	1,049	1,617
Mumps	749	886

## SCARLET FEVER

The decrease in scarlet fever cases reported in 1922 signalled the beginning of a downward curve of this malady which has been prominent in our reports for several years. The type of the disease has been atypical, with transient rash and little discomfort from throat symptoms. That it was true scarlet fever, however, was undoubted for, among the victims were a few who had severe symptoms, at times ending fatally. Although deaths during this mild epidemic were few, amounting to under 1 per cent., the disease was still capable of producing lasting and permanent damage to certain organs, notably the kidneys and heart. None the less dangerous because insidious and not always diagnosed.

at the time of attack, scarlet fever can never be lightly regarded by any health department.

## DIPHTHERIA

There were 771 reported cases of diphtheria in 1922, as compared with 1,059 in the previous year. There was, however, an increase of 29 in the number of deaths from this disease reported during the year more than for 1921. The fatality rate was, therefore, 16.9 per 100,000 population, a higher rate than for any year since 1918. There was either a more malignant type of diphtheria present during the year or many mild cases were not brought to the attention of physicians and therefore escaped diagnosis. This high rate is unusual for Newark, and must be partly attributed to the long continued measles prevalence during the first six months of the year, inasmuch as diphtheria is frequently a complication. The laboratory reports for this time indicate also an unusual prevalence of sore throat, as shown by the numbers of cultures sent in for diagnosis, in which there was a large percentage negative for diphtheria but indicating severe streptococci infection.



THE MEDICAL EXAMINATION OF  
FOOD HANDLERS

C. V. Craster M. D., Fellow, A. P. H. A.  
Health Officer, Newark, N. J.

*Read before the Annual Meeting of the Association of  
American Dairy, Food and Drug Officials, Kansas  
City, Mo., October 6, 1922.*

It may be broadly said that the ideas of sanitation and hygiene are based upon an inherited tendency toward self defense. "The natural instincts of animated life," said Epictetus, "to which man also is originally subject, is self-preservation and self-interest. But men are so ordered and constituted that the individual cannot secure his own safety unless he contributes to the common welfare." This is even truer of modern life than in the case of the older civilization. In fact so intimate are the associations of each man with his neighbors that the far seeing citizen may only hope to secure his own comfort and welfare, and to protect himself and his household from untimely disease and even death, by seeing that the same protection is afforded to all those he comes in contact with. Thus it comes about that the prevention of communicable disease, like the provision of a clean water supply and efficient sewerage systems, must of necessity be community efforts.

The knowledge that dangerous diseases are possible of conveyance by food served in public kitchens and restaurants should again show the need for concerted action to preserve the health of the individual citizen.

The striking story of "Typhoid Mary" by its dramatic appeal, more than any other incident of a like nature, has focused the attention of the public upon the common hazard of the ambulatory carrier of disease germ in his relationship to foods served in restaurants, lunch rooms and hotels. The



physical examination of food handlers was, therefore, the logical reply to the query of health experts and the public as to what should be done about this new danger to community safety.

That the examination of food handlers passed from the realms of theory to those of accomplished facts was due to the efforts of the New York City Health Department. This municipal enterprise was inaugurated some eight years ago in New York under the direction of Dr. Louis Harris, who stated the results of the first two years in the following words: "It is only a beginning, but one whose significance and ultimate possibilities may well be called impressive. The manifold benefits that may ultimately accrue from this system must be left to the imagination of those who have glimpsed the possibilities of preventive medicine, and especially of adult hygiene and periodical medical examination."

This work so well begun was naturally at first tentative, with the hope that experience would demonstrate the best procedures to serve so great a venture in disease prevention. Difficulties in the form of medical service soon arose, partly due no doubt, to the inexperience of the private physicians who were called upon to assist the health department in making the physical examination. The occupation clinics conducted by the department were handicapped by their limited staff, and yet the work done was clearly more satisfactory than that of the private physician. In one year the occupation clinics conducted by Harris made 23,386 medical examinations to 59,000 by the private physicians. Yet out of 127 cases of active tuberculosis found 118 were diagnosed at the occupation clinics. This result clearly indicated either faulty knowledge on the part of the private physicians or methods so lax as to show complete indifference to the importance of the procedure.

In the New York experiment a very complete medical examination was attempted, which raised the important ques-

on as to whether the true reason for food handler examinations had been met in this way. Is it desirable or necessary in such a procedure for a municipality to undertake to look for all physical defects or only for the presence of contagious diseases? This question is important from the point of view of the expense of the service that shall be rendered and the quality of the expert advice needed. From the aspect of the spread of communicable diseases, the sanitary examination embracing that for contagion alone may be clearly differentiated from the form of examination required by insurance companies and life extension institutes. On the other hand, the physical examination of food handlers described by Gloyne (*J. A. M. A.*, May 13, 1922), as carried out in Kansas City, Kansas, is apparently directed towards contagious conditions alone, and in this respect principally venereal diseases although the desirability of a mental examination is suggested by the health commissioner.

It is clear that the medical examination of food handlers, as a health measure, need not be as comprehensive nor directed toward the finding of physical defects of a non-contagious nature which, although informing and perhaps remediable upon a broad scale, do not affect the usefulness or desirability of the food handler as an employee.

It is thus virtually immaterial to the health administration whether the food handler under its jurisdiction be suffering from flat foot or spinal curvature whereas it is very vital to know of the existence of tuberculosis or diphtheria in such employees.

In the main, public health authorities must necessarily take a broad minded attitude with regard to the prevention of disabling diseases and, indeed, toward the maintenance of health itself as a community asset. This view, however, must give way to the more pressing need of determining the necessary freedom from contagion of those who are doing

work in such intimate contact with the public as that of serving food and drink.

In the case of the city of Newark the necessity for such



### Making a Thorough Chest Examination.

genitals for venereal diseases. Such an examination would at least provide the minimum safeguards against infection by food. Sufficient authority for such an examination existed in the New Jersey Sanitary Code, which in regulation 37 states: "Any waiter, cook or other person employed in any hotel, restaurant, boarding house or other place where cooked food is offered for sale, who handles or prepares food may be required to submit to a physical examination by a medical inspector of any local board of health or the State Department of Health for the purpose of ascertaining whether or not he is affected by any communicable disease, whenever in the judgment of the health officer such examination may be necessary."

To further extend the requirement of physical examination, and to authorize the use of private physicians if the department so wished, an additional city ordinance was passed in 1918 which brought all food handlers under its provisions.

Under this authority the examination of food handlers was started in 1920. The food handlers coming most intimately into contact with cooked foods, such as employees of restaurants and hotels, were required to appear at the Department of Health clinics for examination. Where food handlers, such as milk dealers, soda fountain operators, etc., could present a certificate from a reputable physician they were accepted. For the guidance of the latter, and to standardize this examination, a letter of instruction was issued to all physicians making such examinations, giving the minimum requirements of the medical examination.

#### RESULTS OF NEWARK EXAMINATIONS

Since August, 1920, there have been 11,851 examinations made by the Newark Department of Health alone. As stated before, no special effort was made at this examination

The following conditions were found:



Taking Widal for Typhoid Fever.

Year	Number Examined	Suspicious for Tuberculosis	Positive Tuberculosis	Veneral Disease	Leishmaniasis	Chancres
1920	2,314	439	25	10	42	35
1921	4,525	625	48	18	12	34
1922	5,012	395	18	9	0	—
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	11,851	1,459	91	37	54	218

#### TUBERCULOSIS

The number of tuberculous patients in the hospital during the year ending March 31, 1923, was 218. The number of tuberculous patients in the hospital during the year ending March 31, 1922, was 34. The number of tuberculous patients in the hospital during the year ending March 31, 1921, was 48.

five months of the year. The proportion of positive to suspicious cases of tuberculosis found, 91 out of 1,459, 6.3 per cent., is apparently a low one. It is explained partly by the fact that many of these cases discontinued food handling after the preliminary examination, preferring to seek other work than to be discharged as a result of their physical condition. Others, put under special treatment and advised to rest, at subsequent examinations had no clinical symptoms. Some of these cases were observed for many weeks, and every effort consistent with safety of the public was made to keep these people on their jobs. The positive cases of tuberculosis to the thousand examined each year was as follows.

1920	...	9 per 1,000
1921	.....	9 per 1,000
1922	....	6 per 1,000

This is a comparatively low incidence for the disease among a special group of industrial workers and less than the incidence recorded for the general population. The large number of suspicious cases required repeated examination and observation with laboratory controls. No definite diagnosis of tuberculosis was made without the confirmation of the clinical symptoms by positive sputum and X-ray examination. The positive cases were of course immediately rejected and refused food handling cards. Many of the rejected applicants were unaware of their condition and expressed surprise at their rejection. One of the most gratifying results of this examination was that the actual cases of tuberculosis were put under proper medical treatment, and wherever possible for desirable sanatorium treatment was arranged for.

#### VENEREAL DISEASES

Among the 11,851 examinations made only 37 cases of venereal disease were found. This group of workers was

therefore remarkably free from such infections. Under this head no diagnosis of venereal disease was made with ut positive laboratory findings, a positive smear showing the specific organism in gonorrhea and a positive Wassermann or a positive dark field diagnosis in the case of syphilis. These results were in contrast with the findings of Gloyne, who apparently found venereal diseases extremely common among the food handlers of Kansas City. Gloyne very rightly rejected all venereally infected persons from handling food. This stand was criticized by Ashburn (*J. A. M. A.*, June 3, 1922) and Irvine (*J. A. M. A.*, June 24, 1922). There can in my opinion little be said in favor of allowing venereally infected persons to handle foodstuffs. In the case of gonorrhea there is always the possibility of the spread of ophthalmia in the restaurant. Also the associated pus conditions in these cases cannot be regarded as free from danger to the public. In the case of syphilis, at least with active lesion during the primary and secondary stages of the disease, there is considerable risk in infection from syphilitic lesions in the mouth and throat by tasting food or the use of glasses and cups. In any case, although actual cases of such accidental infection may be infrequent, it is none the less our duty to prevent as far as possible in our power so abhorrent a possibility. The case of the syphilitic with no open lesion, with perhaps even a four plus Wassermann, is different. Such a person may conceivably be allowed to handle food provided that proper anti-syphilitic treatment is assured during the period of employment.

#### SKIN DISEASES

Only 54 skin eruptions were found. It is noteworthy that all but 12 were among employees examined during the first year. In the second year the number was less, and in the third year none were reported. This is a signal result showing the greatest freedom from skin eruptions of the food handlers since the examinations were inaugurated. It also

indicates the refusal of the restaurant employer to engage individuals for this class of work when suffering from skin eruptions. Although many skin diseases were diagnosed as non-contagious, the position taken with regard to skin infections was that such were undesirable in food handlers. Although it is conceded that many types of streptococci are found normally upon the skin, it was considered that the contagion of boils and carbuncles was especially virulent and capable of being conveyed to food. The virulence of such germs found in milk during epidemics of sore throat must not be forgotten in this regard.

#### VACCINATION

Vaccination was required of all individuals. Two hundred and eighteen persons were found with no or unsatisfactory vaccination marks, a remarkable showing among so large a number of a special group of workers.

#### TYPHOID AND DIPHTHERIA

It is noteworthy that among this large number of food handlers not a single typhoid or diphtheria carrier was located, although a routine Widal test and throat and nose swabs were taken for each individual. This result was mainly due to the special laboratory efforts made to establish the identity of suspicious cultures from the throat and nose. Any partial Widal test was followed up by a special investigation of the suspected individual by clinical methods. The results of this intensive follow-up clarified in a surprising way conditions which were at times apparently disconcerting.

#### SUMMARY

It has been asked: "Is the physical examination of food handlers possible for ~~smaller~~ communities in the light of its cost for specialized assistance?" The answer will depend upon the point of view and whether a medical or a sanitary



inspection is contemplated. If the latter, the necessary examinations may be made by any well-equipped physician employed by a local board of health, assisted by a good laboratory, inasmuch as the greater part of the examination is routine laboratory tests for diphtheria, typhoid fever, and venereal diseases. On the other hand, a complete medical examination means the employment of many experts.

Granted that the expense for this special preventive activity can be met, are the results worth while? Although the findings of the examinations for a period of two years in the city of Newark indicate that contagion is not more prevalent among food handlers than among any other body of industrial workers, the evidence gathered shows that many of them were found to be employed while in a diseased condition. Inasmuch as in no other business is there so much danger of spreading infection as between infected food handlers and the consumer, the safeguarding of the public in this way is well worth while. It has been shown that even in its early stages it has had a remarkable effect upon the general welfare of the food handlers, eliminating from this group of workers the cheap labor of diseased persons from other occupations who might seek the lighter and more elastic hours of food handling. This is particularly true of food handlers for the reason that many are part time, being frequently recruited from the married women and mothers of families who have some of their day at their disposal for industrial purposes.

From the point of view of preventive medicine, there can be little doubt that the physical examination of food handlers has come to stay, taking its place with the supervision of mother and baby, and the medical inspection of school children, as a community effort to control disease and prolong the span of life which the public can justly demand as a necessary municipal undertaking.

A DANGEROUS TYPHOID CARRIER AND  
HIS RECORD

By Edward E. Worl, M. D.

The former days of purely clinical study of disease have passed away; for the discovery of "carrier" cases in infectious diseases has opened up a new limitless field. No field in preventive medicine today is more deserving of attention on the part not only of physicians but the public as well. Carriers are of two kinds: 1. Those who have passed through the disease and though they have reached "clinical" recovery continue to harbor and excrete the germs of their disease. These are "active carriers." 2. Those who have been in contact with patients or other carriers of disease. These are "passive carriers."

The discovery of these germ carriers is today of the greatest import. They explain many epidemics which otherwise cannot be traced, and they emphasize the great need of co operation between the clinicians and the laboratory, which is today largely neglected when a germ disease patient is discharged merely on "clinical standards."

In the case of typhoid fever the fact that we have pure water and milk is not sufficient; we must control the carrier or there will be sooner or later contamination. Medicine does not do away with them, surgery is a little better, but insufficient, police regulation is best of all. We need today in addition to the police law to strengthen the Sanitary Code of the State of New Jersey. Registration and reporting alone are insufficient. What is a typhoid carrier? There is necessarily a distinction to be made between an "acute" carrier and a "chronic" carrier. Clinical recovery precedes germ recovery. The normal typhoid case excretes for at least eight weeks to ten weeks, dating from the beginning of the disease. In the case of relapse or relapses we must begin

our date all over again. Any case with germs beyond these periods must be viewed with suspicion on account of the tendency to pass into the condition of "chronic" carrier. Chronic carriers have been traced for forty six years so that the condition practically considered may last a life time. Nearly four per cent. of typhoid cases may become carriers. A single negative examination means little; often repeated examinations are necessary. An "intermittent" carrier is a most dangerous type. Only a small percentage of children become carriers, but 82 per cent. of all "chronic" carriers have been found to be women, and this has a great bearing on the question, for they are apt to be our cooks and food handlers. We are constantly in danger. While the male carrier is included in the smaller percentage of carriers (14 to 17%) he is apt to be pretty dangerous as the following history shows, a history fully as interesting as "Typhoid Mary" of great celebrity.

Tony Labella 39 years unmarried a Sicilian by birth and not a U. S. citizen—5 feet 10 inches—175 pounds—presents the appearance of rugged health. He came to this country twenty-one years ago, but about sixteen years ago went back to Italy on a visit. He denies any typhoid history, but when 14 years old at Palermo, Sicily, he gives a history of being ill for two weeks with stomach trouble and malaria. He never resided or worked in New Jersey prior to November, 1921, when he was employed at St. Joseph's Villa, Washington Township, Morris County.

His condition was first discovered September 16, 1921, by the State, and he was considered the cause of the epidemic then, resulting in seventy-two cases and three deaths. He was State registered and given instructions and apparently followed them for some time. He consulted a laboratory and apparently received a favorable report. The lure of the farm took him to a dairy in upper Jersey which marketed milk mostly in Newark. In the early summer of 1922 he

was not much employed in milking, but from September to December, 1922. We can trace to this milk thirty-five cases of typhoid and three deaths, so that his total record is as follows:

June, July, August, 1921 (first epidemic), 72 cases, 3 deaths; September to December 12, 1922 (second epidemic), 5 cases, 3 deaths; total, 107 cases, 6 deaths (5.6%).

This is a low and fortunate mortality, and while Newark did not escape, it could have been much worse. Early in October, 1922, our attention was directed to the typhoid cases where this milk was used. The company employed were a superintendent and two drivers for the milk delivery. Tests on these proved negative. On a visit to the dairy an examination was made of the premises and tests taken of the water and milk and four tests made of the four persons employed on the farm, Tony Labella giving a false or assumed name. The stool test was taken from dry stool and proved insufficient. All the tests came negative, but the state agent on a visit recognized Tony from the previous epidemic, and the examination of a fresh stool proved him still a carrier. He was committed under court proceedings—law of 1908—to the City Hospital, photographed and fingerprinted and ultimately released under agreement of specified occupation.

This case carries some unusual features. He is a rather unusual type of "male carrier" he falsified his name—most tests on him are negative—the "fresh stool" reveals him. His condition is of long standing, possibly twenty-five years. It is possible that he is an "intermittent carrier"—single negative on him means little or nothing. How can we meet these conditions? The present law in my opinion is entirely inadequate. There should be legislation or regulation as follows:

1 Photograph and fingerprint the "chronic carrier," and distribute these identifications to boards of health, milk stations and carries.

2. Fine and imprisonment for a "chronic carrier"—to engage as cook, dairyman, or handler of milk and food supplies.

3. There should be a penalty for a "carrier" to change his or her name or conceal their identity.

4. Typhoid vaccination for all milkmen and food handlers of any type.

For purpose of comparison we offer the typhoid cases and deaths in Newark for the last five years

1918	.....	69 Cases—15 Deaths
1919	.....	72 Cases— 9 Deaths
1920	.....	61 Cases— 8 Deaths
1921	.....	74 Cases—12 Deaths
1922	.....	130 Cases—12 Deaths
Total, five years		406 Cases—56 Deaths (13.8%)

It will be observed that even deducting the thirty five cases of this epidemic our typhoid cases were somewhat in excess of the normal, so that 1922 was in some respects a "Typhoid Year."

ANNUAL REPORT

OF THE

Division of Sanitation



ANNUAL REPORT  
OF THE  
Division of Sanitation

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*Charles V. Craster, M. D., D. P. H., Health Officer.*

DEAR SIR —I herewith present the annual report of the Sanitary Division for 1922.

Respectfully,

WILLIAM H. YOUNG,  
*Chief Clerk, Sanitary Division*

SANITARY CONDITION OF THE CITY

During the year the total number of inspections made was 26,439, as compared with 119,623 for the preceding year, an increase of 6,816 over that of last year. A house to house canvass was carried on by the Sanitary Inspectors during the early part of the year. This canvass was made in all sections of the city and it was most surprising to note the small amount of violations detected. The primary purpose of this survey was for the correction of any sanitary violations that may have existed on the premises visited and to have a record on file in this office of all the houses investigated. Another reason for the canvass was to determine if it was necessary to carry out the annual Clean-up Campaign this year. After the results shown in the house to house canvass it was decided to dispense with the annual clean-up, and it was the opinion of the Inspectors that the ordinary Spring household debris could be collected by the city scavengers on the usual collection days for such material.



## POULTRY SLAUGHTER MARKETS

During the year the Sanitary Inspectors found it necessary to make almost daily inspections of the poultry slaughter houses on their districts, to insure the same being conducted in a sanitary manner, and the premises kept in a clean condition in accordance with our rules and regulations governing such establishments. Some of the market owners permitted their standholders and patrons of the market to pluck poultry in the market proper instead of compelling them to pluck all fowls in the plucking room built especially for that purpose. It was necessary to serve a number of written notices to compel the owners to comply with this section of our Sanitary Code. A number of written notices were served notifying owners to clean and paint up their markets and keep the same in a sanitary condition at all times.

A number of poultry slaughter house owners and their standholders were cited to appear before the Health Officer to answer charges of failing to conduct their business and keep their premises in a sanitary condition. These persons were warned that a further violation would be sufficient cause for this Department to immediately revoke their licenses. Due to such warnings and closer supervision by the Sanitary Inspectors we find that conditions have greatly improved in these establishments.

The poultry slaughter house has always been a source of great annoyance to the Health Department, but considered a necessary evil. At best they are considered a nuisance and were established for the purpose of eliminating the practice of killing and plucking of fowl in private homes, such practice being carried on very promiscuously in former years, especially in the congested localities of the city.

The Board of Commissioners of the City of Newark adopted a building zone ordinance in the year 1919, one of

the requirements prohibiting the further establishment of poultry slaughter houses in residential, business or light industrial sections. Under this ordinance these establishments are permitted only in the heavy industrial districts in which locality the erection of dwelling or tenement buildings are prohibited.

We find that this regulation has greatly reduced the number of persons applying to this office for permission to conduct public or private slaughter houses, and we believe will eventually be amended to remove all existing public or private chicken slaughter houses to the heavy industrial zone.

#### PROPER ASH AND GARBAGE RECEPTACLES

During the early part of the year the Sanitary Inspectors were engaged in serving notices on householders, apartment and tenement house owners, restaurant proprietors, etc., notifying them of the necessity of providing proper galvanized iron cans with tight fitting covers to care for the garbage accumulation on the premises and suitable strong boxes or small barrels for ashes and refuse. Many householders complained to the Inspectors of the difficulty they encounter in keeping their garbage receptacles in good repair. They complain that the collectors handle same in such a way that it is necessary to buy new ones every few weeks. This Department has communicated this fact to Mr. Costello, Engineer in charge of the garbage collections, who informs us that he had a conference with all foremen in the Garbage Collection Division and instructed them to see to it that the men engaged in this work handle the metal garbage receptacles with care and not to abuse or destroy them.

Upon a recent survey we find that about 80 per cent. of the householders throughout the city are supplied with proper garbage receptacles.

## SMOKE AND FUME NUISANCE

We have been in receipt of numerous complaints during the year of smoke and fumes entering living rooms of buildings which are adjacent to structures of lower height, said smoke and fumes emanating from the chimneys on the smaller buildings. We have suggested to the Building Department of the City that where new buildings are to be erected and the same are lower than the premises adjoining, provisions should be made in the plans whereby the chimney of such building be erected in such a position that would insure the least amount of smoke and fumes from entering the windows of the taller buildings adjacent. This suggestion, if carried out, we believe will do much to eliminate the nuisance complained of.

## NEW WORK SCHEDULE

A new working schedule has been inaugurated in the Sanitary Division. Formerly it was the duty of all Sanitary Inspectors to investigate all complaints received in this office, also to cover the district to which they were assigned and make original inspections. The new system provides for six men whose duty is to investigate all complaints received in the office. The remainder of the Inspectors are assigned to the various wards throughout the city and it is their duty to thoroughly patrol their districts and make house to house and original inspections. We find that this system considerably relieves the Ward Inspector and that he is able to devote more time to patrol work and original inspection. We have also assigned the Ward Inspectors to districts for an indefinite period instead of one year, as was the rule in the past. This we find enables our Inspector to determine just what localities on his district are considered bad spots and which section should be kept under constant surveillance.

LIST AND NUMBER OF LICENSES ISSUED BY THE SANITARY DIVISION FOR THE YEAR 1922, AS COMPARED WITH THE YEAR 1921

	1922	1921
Animal permits	68	94
Bird store licenses	8	8
Chicken licenses	1,872	2,092
Commission house permits	36	36
Ice licenses	409	384
Refuse permits	34	45
Scavenger licenses	1	1
Slaughter house licenses	54	52
Stall holders' permits	28	28

The following inspections were made during the year in the interest of the Anti-Fly Campaign:

	1922	1921
Stables and cow barns	2,833	2,951
Manure accumulations	523	546
Manure bins and pits uncovered	456	405
Garbage and refuse accumulation	2,218	3,498
Scavenger dumping grounds	116	254
Inspection of yards	32,345	32,301
Number of yards found unsanitary	3,580	3,453

#### LEGAL PROCEEDINGS

There were 225 cases turned into the Law Department for legal action, of which judgment was obtained on 48 cases, 172 were discontinued upon the payment of costs, owing to the violations complained of being abated at the time the cases were presented in court. Five cases are still pending.

In addition to the above there were 596 24-hour court summonses served. It was necessary to serve these summonses as the conditions complained of required immediate abatement.

## DEPARTMENT OF PUBLIC AFFAIRS

## WORK PERFORMED BY THE SANITARY DIVISION

	1922	1921	1920
Total number of inspections made: .....	126,439	119,623	114,287
Inspections from complaint cards.....	9,412	6,579	6,149
Original inspections made.....	114,390	112,623	92,136
Special inspections made.....	2,637	421	6,088
Total number of re-inspections made.....	37,840	38,828	34,460
Total number of nuisances found.....	23,955	21,154	28,227
Number of verbal notices served.....	9,340	10,190	12,238
Number of written notices served.....	6,036	4,753	5,688
Number of special notices served.....	1,730	180	343
Total number of notices served.....	17,106	15,123	18,549
Abatements from verbal notices.....	7,997	44	11,117
Abatements from written notices.....	11,548	9,681	11,838
Abatements from special notices.....	1,508	119	746
Total number of abatements.....	21,053	19,344	23,201
Alleyways inspected.....	21,661	13,848	14,910
Alleyways insanitary.....	2,087	2,935	2,119
Areaways inspected.....	11,310	8,058	11,753
Areaways insanitary.....	1,958	1,670	2,251
Cellars inspected.....	25,458	25,474	27,458
Cellars insanitary.....	2,771	2,714	3,054
Cellar, insanitary.....	32,345	32,301	29,974
Yards inspected.....	3,580	3,453	4,613
Yards insanitary.....			
Cattle and chicken slaughter houses inspected.....	2,978	2,066	1,039
Cattle and chicken slaughter houses insanitary.....	188	83	127
Cisterns and wells inspected.....	23	12	80
Cisterns and wells insanitary.....	1	2	12
Cisterns and wells closed.....	3	2	
Factories inspected.....	732	1,099	1,681
Factories insanitary.....	119	150	534
Schools inspected.....	674	1,210	466
Schools insanitary.....	7	29	5
Stores inspected.....	6,291	6,136	5,685
Stores insanitary.....	652	470	416
Tenement houses inspected.....	10,505	11,315	9,069
Tenement houses insanitary.....	1,597	1,164	1,352
Houses unfit for habitation.....	43	41	37
Living rooms insanitary.....	2,961	2,023	2,219
Dark and windowless rooms.....	34	30	51

## DEPARTMENT OF HEALTH

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	1922	1921	1920
Theatres inspected	513	733	414
Theatres insanitary	8	38	43
Buildings with no city water supply	236	404	616
Buildings unprovided with water closet or privy vault	19	57	42
Buildings with roofs, storm gutters or leaders defective	1,984	1,343	1,768
Plumbing in or on premises defective	2,422	2,084	2,073
Sewer connections ordered	94	72	81
Pits under water closets defective	78	110	86
Water closets not supplied with water	1,054	973	1,848
Privy vaults and cesspools inspected	189	239	345
Privy vaults and cesspools insanitary	37	64	126
Privy vaults and houses ordered reconstructed	11	15	110
Privy vaults ordered cleaned and filed	28	58	69
Garbage and refuse accumulation	2,218	3,498	4,989
Stables inspected	2,833	2,951	3,043
Stables insanitary	448	571	627
Manure accumulation	523	546	632
Manure bins and pits uncovered	456	405	491
Streets insanitary	5	70	464
General inspection cards filed in office	3,590	952	323
Visits to agents and owners of real estate	3,521	3,234	3,348
Warning cards handed to violators of spitting ordinance	315	72	244
Arrests made for violating spitting ordinance	22	56	13
Days detailed to enforce spitting ordinance	13	33	21½
Number of spitting signs posted	198	228	99
Number of hours in court	512½	360	510
Number of inspections for chicken and ice permits	1,961	4,303	4,051
Notices served for inspectors assigned to other districts	2,015	1,353	1,725
Dead animals reported	219	270	264
Complaints referred to other city departments	150	130	140
Avenger dumping grounds inspected	116	254	264
Number quick summons served	596	204	362

	1922	1921	1920
Dispensary cases investigated	150		
Inspection of miscellaneous nature. . .	8,966		

Reports of City Scavenger conditions for the year 1922 as reported by the Sanitary Inspectors in the sixteen wards in the city have been good

ANNUAL REPORT OF CHIEF SANITARY  
INSPECTOR

*Dr. Chas. V. Craster, Health Officer.*

DEAR DOCTOR: I herewith submit my report for the year ending December 31, 1922

Respectfully,

ANDREW J. BRADY,  
*Chief Sanitary Inspector.*

My duties as Chief Sanitary Inspector bring me in all sections of the city and it gives me pleasure to report the general sanitary conditions of the city at large to be in a very fair condition.

There are sixteen (16) wards in the city and each ward is covered by a trained sanitary inspector, with the exception of the Third Ward, which is divided into two districts. Each inspector is held responsible for the general sanitary condition of his respective district. Their duties consist mostly of house to house inspection and visiting bad spots on their districts. There are six experienced inspectors detailed on complaints made to the Health Office, who investigate same and make a detailed report on conditions found and serve a written notice and follow up the same until abated or prosecuted.

Ashes, rubbish and garbage removal throughout the entire city was very satisfactory, as few complaints were received at this office in reference to the collections of same. While there is not a separation of garbage in all sections of the city, the percentage of garbage going to the ash dumps is not more than 5 per cent. The separated garbage goes to the piggery.

The scarcity of coal during the winter months gave our



inspectors a great deal of extra work in making investigations of applications for coal.

Another growing problem is the increase in the number of furnished room and cheap boarding houses throughout the city. These premises will have to be carefully watched for insanitary conditions and overcrowding.

# NUMBER OF VISITS MADE TO WATER SHED AND SAMPLES OF CITY WATER SUPPLY TAKEN AT THE FOLLOWING PLACES FOR BACTERIOLOGICAL EXAMINATION

Oak Ridge Stream	2
Clinton Stream	2
Kanouse Stream	2
Echo Lake Stream	2
Macopin Intake (inside of gatehouse)	2
Cedar Grove Reservoir (outside of inlet gatehouse)	23
Cedar Grove Reservoir (outside of outlet gatehouse)	23
Belleville Reservoir (inside of inlet gatehouse)	23
Belleville Reservoir (outside of outlet gatehouse)	23
Board of Health Building (Faucet in City Dispensary)	23
Stream on Mr. Jennings' Farm, Oak Ridge	1
No 28 Avon Pl (Sample taken from faucet)	1
Prudential Insurance Co, 763 Broad St (Before filtration)	10
Prudential Insurance Co, 763 Broad St. (After filtration)	10
Total	247

## SAMPLES TAKEN FROM WELLS IN CITY

Driven Well at 95 Orange St.	1
Tank at 95 Orange St.	1
Driven Well at 329 Frelinghuysen Ave	1
Driven Wells, Prudential Insurance Co., 763 Broad St.	3
Well No. 1	3
Well No. 2	3
Well No. 3	3
Well No. 4	3
Out of Town Well Samples -	
Dug Well on City Property, Charlettsburg, N. J.	2
Dug Well, Essex Fells, N. J.	1
Total	18

## SAMPLES OF ICE TAKEN

Mountain Ice Co.—Artificial 3, Natural 2	5
Jackawanna Ice Co.—Natural	1
Knickerbocker Ice Co.—Natural	1
Drake Ice Co.—Natural	1
Albion Ice Co.—Artificial	1
North Newark Ice Co.—Artificial	1
Orange Mountain Ice Co.—Artificial	1
City Hospital—Artificial	2
Total	13

## SAMPLES TAKEN IN SWIMMING POOLS AND MIKVEHS

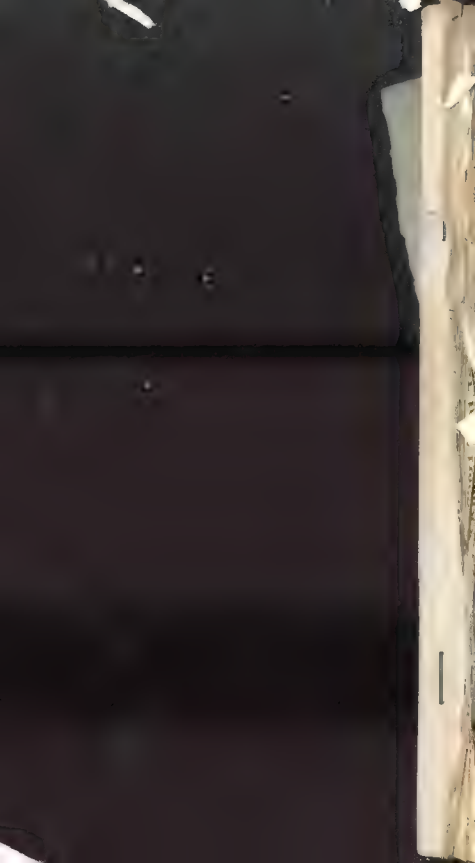
Hill Bath Pool	12
Hill Bath Mikveh	7
Howard Bath Pool	13
Howard Bath Mikveh	6
Charlton Bath Pool	14
Charlton Bath Mikveh	7
Mercer Bath Pool	14
Y. W. C. A. Pool	13
Huber Bath Pool	13
Y. M. C. A. Pool	13
City Bath Pool	13
Total	125

## OPEN AIR WADING POOLS

Branch Brook Park Wading Pool	3
West Side Park Wading Pool	3
Weequahic Park Wading Pool	3
Total	9
Total Number of Samples Taken	412

Number of visits to Water Shed, twenty-seven (27), including three days' investigation on account of the Typhoid Fever epidemic at Franklin Furnace, adjacent to our water shed.

Number of investigations made, eighty-two (82).



## DEPARTMENT OF HEALTH

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## SAMPLES OF ICE TAKEN

Mountain Ice Co. Artificial 3, Natural 2.....	5
Lackawanna Ice Co. -Natural.....	1
Knickerbocker Ice Co.-Natural.....	1
Drake Ice Co.-Natural.....	1
A. boum Ice Co. -Artificial.....	1
North Newark Ice Co. Artificial.....	1
Orange Mountain Ice Co.-Artificial.....	1
City Hospital Artificial.....	2
Total.....	13

## SAMPLES TAKEN IN SWIMMING POOLS AND MIKVEHS

Hill Bath Pool.....	12
Hill Bath Mikveh.....	7
Howard Bath Pool.....	13
Howard Bath Mikveh.....	6
Charlton Bath Pool.....	14
Charlton Bath Mikveh.....	7
Mercer Bath Pool.....	14
Y. W. C. A. Pool.....	13
Huber Bath Pool.....	13
Y. M. C. A. Pool.....	13
City Bath Pool.....	13
Total.....	125

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Weequahic Park Wading Pool.....	3
Total.....	9
Total Number of Samples Taken.....	412

Number of visits to Water Shed, twenty seven (27), including three days' investigation on account of the Typhoid Fever epidemic at Franklin Furnace, adjacent to our water shed

Number of investigations made, eighty-two (82).

Other inspections and official calls made in Water Sheds one hundred and ninety six (196). On my trips to and from the Water Shed, I found the toilets in the Susquehanna Railroad trains open three times

## INSPECTIONS MADE

Lodging houses inspected, semi-monthly ..	9
Public bath houses inspected, semi monthl.	8
Parochial schools inspected .. ..	25
Private schools inspected .. ..	4
Hospitals visited .. ..	22
Number of inspectors' reports verified ..	167
Inspections made with district inspectors.	11
Special inspections made with health officer	27
Special inspections made for health officer ..	191
Special investigations for health officer ..	47
Out of city investigations made ..	21
Inspections made at night .. ..	17
Inspections made on Sunday .. ..	17
Poultry slaughter houses inspected ..	5
City ash dump inspected .. ..	
Land inspected for cemetery purposes ..	
Buildings inspected for lodging houses ..	
Written reports to health officer ..	21
Verbal reports to health officer .. ..	5
Special reports on poultry slaughter houses. .	5
Special reports on conditions in water shed ..	8
Official calls and visits on health matters ..	157
Investigations .. ..	150
Days detailed in office .. ..	36
Days in court .. ..	11
Number of visits to Cedar Grove Reservoir ..	23
Number of visits to Belleville Reservoir ..	23
Total number of re-inspections made .. ..	99
Days at water shed .. ..	19
Number of conferences of the Sanitary Division attended ..	9

Numerous complaints were made to the Health Officer in reference to Book Agents representing themselves as Health Nurses from the Health Department for the purpose of selling their books. These cases were investigated and the agents brought before the Health Officer.

## REPORT OF DETAILED HEALTH INSPECTOR FOR 1922

*Dr. Charles V. Craster, Health Officer.*

DEAR SIR: I herewith present the annual report for the year ending December 31, 1922 covering dogs and rabies.

*Respectfully,*

CHARLES F. DIVINE,  
*Sanitary Inspector.*

There has been a notable increase in the number of persons bitten by dogs for the year 1922, 636, as compared with 520 for the previous year and 458 in 1920. The number of animals found to be positive for rabies was eight, the highest number since 1918. Rabies was quite prevalent in this entire section last year, as evidenced by the fact that twenty-two positive cases were diagnosed at our laboratory for nearby towns, as shown in the following table.

Summit	1	Clifton	2
Sterling	1	Nutley	1
Rutherford	2	Belleville	1
Roseland	1	New Providence	2
Orange	1	Livingston	1
Madison	2	West Orange	5
Lyndhurst	1	North Arlington	1

Incidentally, in addition to the above many other positive cases in these and other nearby towns may have been diagnosed at other laboratories.

Six hundred and thirty six persons were bitten by dogs, fourteen by cats and four by horses. A record of each case and its subsequent history is kept on file at the laboratory.

The following table shows the number of animal bites and rabies cases in Newark since 1910

	Persons Bitten	Animals Examined	Positive Cases	Negative Cases	Persons Given Anti-Rabies Treatment
1910	218	33	21	12	40
1911	350	28	13	15	26
1912	536	46	21	25	62
1913	612	43	17	26	41
1914	509	30	7	23	13
1915	566	38	3	35	3
1916	432	17	3	14	4
1917	506	42	20	22	31
1918	465	25	15	10	43
1919	493	19	5	14	4
1920	465	19	4	15	4
1921	539	16		16	
1922	654	59	28	31	13

Following is a report of investigations in rabies work:

Persons bitten by dogs	1922	1921
Persons bitten by cats	636	520
Persons bitten by horses and other animals	14	7
Total number of persons bitten and cases investigated	4	12
Original inspections	654	530
Reinspections (dogs under observation)	1,034	633
Final inspections (dogs under observation)	596	493
Total number of inspections made	458	448
Cases reported by Police Department investigated	2,138	1,715
Dogs bitten	194	175
Cats bitten	51	60
Dogs sent to pound and destroyed	10	4
Cats sent to pound and destroyed	58	62
Complaints investigated (dogs, miscellaneous)	7	2
	80	81

#### LABORATORY EXAMINATIONS

Dogs brains examined	1922	1921
Positive	22	16
Negative	6	0
Dogs' brains examined (out of city cases)	16	16
Positive	37	11
Negative	22	7
Cat's brain examined (negative)	15	4
	1	0

ANNUAL REPORT OF THE INDUSTRIAL  
HYGIENE BUREAU FOR THE  
YEAR 1922

Dr. Chas. V. Craster, Health Officer.

DEAR SIR: I herewith submit my report for the year 1922.

Respectfully,

BERNARD J. CAHILL,  
*Detailed Health Inspector.*

The subject of Industrial Hygiene is so intimately associated with the operation of the factory laws that in order to study the one we must know something of the other. Factory legislation has been in the main devised to protect the health of the workers and to safeguard their interests. No matter what legislative laws may be enacted, however, industrial hygiene will never be secured until the workers themselves are educated in regard to the dangers incidental to particular trades and are willing to co operate in making industrial regulations effective. There must be a greater amount of mutual trust and a heartier co operation of employers and employed. No person should be employed in a hazardous trade until the risks have been explained to him by his employer, and the means indicated whereby danger to health may be averted.

Almost all diseases of occupation are preventable, the contributory causes of which are a lack of ventilation, mechanical suction systems, condensing and destructive apparatus. Health departments should have an adequate corps of trained men to properly supervise and advise employer and employed in the absolute necessity of closer co-operation for mutual protection. Physicians should co-operate with the Health Department by reporting all cases of occupational diseases promptly and by obtaining much needed data on which to



base a Rational Policy of Prevention. Industrial hygiene is not a fad or fancy, but is one of the most important cogs in the wheel of health activities in the protection, promotion and conservation of the health of the worker, and as the working classes form the largest proportion of the population, the conditions under which they labor call for thoughtful study and consideration, not alone by Health Departments, but, also by Medical, Economic and Insurance interests.

I would again recommend that a school of instruction be established in all industrial plants handling materials of a toxic nature, said school to be in charge of the doctor or foreman who shall explain to the employees the risks they run and how to avoid them.

The following is a review of the bureau activities for the year:

#### OCCUPATIONAL DISEASE

Lead Poisoning cases investigated .....	27
Arsenic Poisoning cases investigated .....	2
Phosphorus Poisoning cases investigated .....	2
Other Industrial disease cases investigated .....	25
Total number investigated .....	57
Calls made on these patients .....	115

#### FACTORY SITE APPLICATIONS INVESTIGATED

Acid, dye and chemical plants .....	12
Fur dressing plants .....	37
Mattress and carpet cleaning plants .....	3
Seal and fat rendering plants .....	3
Leather factories .....	7
Smelting and refining plants .....	4
Varnish and other oil boiling plants .....	7
Strip and drop forging plants .....	3
Sheet metal and cooperage plants .....	3
Poultry slaughter houses .....	10
Total number of sites investigated .....	107

## INSPECTIONS

Number of factory inspections .....	1,486
Number of inspections with other inspectors .....	144
Number of inspections made with health officer .....	10
Number of inspections made out of city .....	191
Number of poultry slaughter houses inspected ..	128
Number of night inspections .....	52
Number of noise complaints investigated .....	134
Number of dance halls inspected .....	101
Number of motion picture theatres inspected .....	367
Number of public bath houses inspected .....	106
Number of amusement parks inspected .....	7
<hr/>	
Total number of inspections .....	2,731
Number of official calls .....	2,346
Number of hours in court .....	5

## REINSPECTIONS

Number of poultry slaughter houses reinspected ..	23
Number of factory reinspections .....	531
Number of dance hall reinspections .....	32
Number of motion picture theatre reinspections .....	62
Number of amusement park reinspections .....	8
Number of public bath house reinspections .....	18
<hr/>	
Total number of reinspections .....	674

## POULTRY SLAUGHTER HOUSES

	Approved	Rejected
Applications for public poultry slaughter houses .....	0	6
Applications for private poultry slaughter houses .....	0	12
Number of public poultry slaughter houses in city .....		17
Number of private poultry slaughter houses in city .....		36

In reference to poultry slaughter houses in our city, I wish to state we are receiving very few applications for permits at present, due to the recent ordinance passed by the Zoning Commission restricting all future applications for poultry slaughter house permits to the heavy industrial zones.

# SAMPLES OF CITY WATER TAKEN FOR CHEMICAL ANALYSIS

Oak Ridge Stream	12
Clinton Stream	12
Kanouse Brook	12
Ech Lake Stream	12
Maccan Intake	12
Cedar Grove Reservoir (outside inlet gatehouse)	12
Cedar Grove Reservoir (outside outlet gatehouse)	12
Belleville Reservoir (outside inlet gatehouse).	12
Also assisted Chief Inspector A. J. Brady in taking samples of city water, bath pools, wading pools, wells and natural and artificial ice for bacteriological examination.	
Number of trips to the Water Sheds	20
Number of calls and inspections made in Water Sheds	278

In conclusion I wish to state that this division is much indebted to the State Department of Labor for their co-operation and I personally take this opportunity of thanking Colonel Bryant and his deputy commissioner, Mr. John Roach, for their kindness.

## REPORT OF CHIEF PLUMBING INSPECTOR YEAR 1922

*To Dr. Charles V. Craster, Health Officer.*

DEAR SIR: -I hereby submit report of the Plumbing Division for 1922

Respectfully,

CHARLES A. HALLGRING,  
*Chief Inspector.*

The past year has been the busiest year in the history of this division. The record of plans filed and plumbing permits issued shows a larger number than ever before. The unusual number of additions to, and alterations of existing plumbing systems, would indicate that the plumbing work in the older buildings is being modernized.

The number of new buildings has greatly increased; the greater part of the total new systems installed are in buildings used in part or entirely for dwelling purposes. The cost of building construction is still very high, but this seems to stimulate building rather than retard it.

During the year the inspectors started a survey of the house tanks of the higher buildings and factories. These house tanks are used in some buildings to distribute the water used for all purposes throughout the entire building. In others it is used only for fire sprinkler systems and in others for manufacturing purposes. Some tanks are supplied with water from pumps or driven wells, while others are supplied by both well and city water.

The purpose of the survey was to learn just how many house tanks are in use, how supplied with water, and to learn whether there is any danger of polluting the city water supply through cross-connecting the pipes with the supply

pipes of the wells, and to learn the use to which this water is put.

As we have no knowledge of the number of tanks in use the inspectors are visiting all the larger buildings and factories throughout the city.

To date eighty-one tanks have been inspected, and this number only from twelve is the water used for drinking purposes. Of these twelve tanks, nine are supplied with water from the city mains and the other three are supplied from driven wells. We shall continue to locate and inspect these tanks until the survey is complete and a detailed report rendered.

The septic tanks in use are still producing good results, and six new tanks have been installed during the past year.

The number of registered Master Plumbers has increased over the previous year; this number grows steadily and indicates to some extent the growth of our city.

The plumbing work installed is of high grade and upholds the reputation of our city in having first class modern plumbing.

The following is a summary of the activities of the year 1922

	1922	1921
Plans Approved and Filed		
New Systems .. . . .	1,250	
Addit. ms .. . . .	1,357	
	2,616	2,203
Plumbing permits issued .. . . .	2,616	2,203
Sewer permits issued .. . . .	1,122	852
Relay sewer permits issued .. . . .	166	143
Cesspool permits issued .. . . .	3	
Septic tank permits issued .. . . .	6	
Water tests .. . . .	2,010	1,660
Smoke tests .. . . .	1,065	68

## DEPARTMENT OF HEALTH

103

Plumber inspections . . . . .	3,877	3,601
Special inspections . . . . .	553	638
Sewer inspections . . . . .	1,497	1,204
Final inspections . . . . .	2,056	2,134
Plumbing violations served . . . . .	38	54
Plumbing violations complied with . . . . .	47	39
Complaints received . . . . .	123	132
Notices served . . . . .	39	35
Notices complied with . . . . .	34	27
Law suits instituted . . . . .	22	22
Law suits discontinued . . . . .	12	11
Law suits pending . . . . .	2	2
Penalties imposed on non-licensed plumbers . . . . .	\$325 00	\$450 00
Hours in court . . . . .	65 1/4	116 1/2
Meeting of plumbers' examining board . . . . .	12	12
Applications for master plumber's license examination . . . . .	108	97
Passed examination for master plumber's license . . . . .	44	54
Master plumbers' licenses issued: new 40, re- newals 407 . . . . .	447	429
Septic tanks installed . . . . .	6	2



ANNUAL REPORT

OF THE

Division of Disinfection





# ANNUAL REPORT

OF THE

## Division of Disinfection

for 1922

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To Dr. Charles V. Craster, Health Officer.

DEAR SIR: I herewith submit to you the reports of the Contagious Disease and Disinfecting Divisions for the year ending December 31, 1922.

Respectfully,

CHARLES F. CONRAD,  
*Acting Chief, Disinfecting Division.*

These reports, consisting of a general table of the various reportable diseases by wards, a table of each disease by wards, a table of all diseases (except venereal), in age groups, and a report of the activities of the Disinfecting Division, show a marked decrease over 1921 in diphtheria, scarlet fever, smallpox and German measles. Measles and influenza were exceptionally prevalent.

## DEPARTMENT OF PUBLIC AFFAIRS

## CASES REPORTED

	1922	1921
Diphtheria, including membranous croup (placarded)	763	1,336
Scarlet fever (placarded)	1,423	1,941
Measles (placarded)	3,941	1,331
Infantile paralysis (placarded)	22	1
Small pox (placarded)	1	1
Epidemic meningitis (placarded)	25	7
Typhoid fever	154	57
German measles	264	223
Whooping cough (banded)	2,364	356
Influenza (not placarded)	2,839	763
Total	11,746	7,631

## DISINFECTIONS

	1922	1921
Diphtheria, including membranous croup	739	546
Scarlet fever	1,366	1,611
Tuberculosis	745	97
Epidemic meningitis	24	21
Infantile paralysis	20	11
Small pox	1	13
Special	233	268
Total	3,128	3,837

## MISCELLANEOUS

	1922	1921
Visits and re-inspections	56,020	78,932
Nuisances found	142	96
Funerals supervised	73	51
Control tests	0	0
Number of rooms disinfected	8,116	10,700
Removals by warrant		

# DISINFECTING DIVISION, 1922.

1922

	NUMBER OF CASES REPORTED										NUMBER OF DISINFECTIONS										MATERIALS	
	Dysentery	Scarlet Fever	Measles	Infective Paratyphoid	Smallpox	Epidemic Meningitis	Typhoid Fever	Whooping Cough	Cervical Meningitis	Typhoid	Diphtheria	Scarlet Fever	Typhoid Meningitis	Infantile Paratyphoid	Measles	Whooping Cough	Value	Value	Rate of Disinfection			
January	129	314	243	1	3	4	135	22	130	990	138	185	58	8	3	0	403	56.7	30	1075		
February	94	549	233	4	4	2	141	51	209	2042	88	271	68	3	1	12	445	56.8	10	1089		
March	73	240	382	1	2	2	103	41	370	214	70	304	86	1	1	12	474	300	8	1173		
April	57	131	557	1	2	2	111	36	57	948	52	191	66	3	1	22	335	477	6	111		
May	75	141	803	1	2	2	140	51	24	1360	74	85	83	3	1	37	381	771.4	7	68		
June	36	72	690	1	3	2	29	13	1074	38	116	62	3	3	9	9	278	684.2	11	555		
July	44	59	207	8	1	2	100	12	13	628	27	58	46	2	4	14	151.1	17	344			
August	32	17	71	4	2	10	306	13	17	472	33	24	47	2	5	8	116	271.1	16	305		
September	43	30	61	2	2	13	233	1	11	396	7	18	53	1	2	10	11	698	17	541		
October	5	40	54	1	1	14	218	10	30	497	40	17	4	1	40	1	158	43	11	447		
November	64	48	183	4	2	23	204	5	9	542	59	34	64	1	3	25	186	363.6	6	424		
December	80	77	367	4	2	9	233	5	65	36	81	56	65	2	2	0	72	634.1	8	418		
Total	1043	3641	722	22	26	131	2364	264	2836	1140	136	1364	745	24	11	543	4178	560.14	73	8414		

1922

(Total 1 Tests)

## DEPARTMENT OF PUBLIC AFFAIRS

## CASES REPORTED

	1922	1921
Diphtheria, including membranous croup (placarded)	763	1,336
Scarlet fever (placarded)	1,423	1,941
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Whooping cough (banded)	2,364	356
Influenza (not placarded)	2,839	763
Total	11,746	7,631

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Infantile paralysis	20	11
Small pox	1	1
Special	233	263
Total	3,128	3,837

## MISCELLANEOUS

	1922	1921
Visits and reinspections	56,020	78,952
Nuisances found	142	96
Funerals supervised	73	51
Control tests	0	0
Number of rooms disinfected	8,116	10,700
Removals by warrant		



## REPORT OF DIVISION OF CONTAGIOUS DISEASES

Dr. Charles V. Craster, M. D., D. P. H., Health Officer

DEAR SIR:—I beg to submit the following report of  
tagious diseases for 1922 by wards.

Respectfully submitted,

EDWARD E. WARD, M. D.  
Supt. of Contagious Diseases

## DIPHTHERIA

1917	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Jan 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Mar 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Apr 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
May 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
June 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
July 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Aug 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Sept 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
November 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
December 1st	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

## S4 A 7 FF I 4 VE 6

	10	18	25	12	8	16	1	14	22	3	5	9	16	10	17	24	31	0
In	10	18	25	12	8	16	1	14	22	3	5	9	16	10	17	24	31	0
February	1	7	14	5	8	12	16	19	24	6	7	11	18	25	3	10	17	24
March	3	9	17	5	5	12	14	15	19	5	8	9	14	20	2	10	17	24
April	5	8	16	1	3	7	6	11	16	1	9	14	17	20	2	10	17	24
May	5	8	16	1	3	7	6	11	16	1	9	14	17	20	2	10	17	24
June	5	8	16	1	3	7	6	11	16	1	9	14	17	20	2	10	17	24
July	3	6	6	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
Aug	3	6	6	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
Sept	3	6	6	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
October	3	6	6	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
November	3	6	6	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
December	3	6	6	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
Total	60	56	128	31	31	5	60	119	100	5	90	41	5	10	34	10	34	10

## TYPHOID FEVER

[illegible]

10	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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[illegible]



## PNEUMONIA BRONCHIO

1922	1	2	3	4	5	6	8	9	11	12	13	14	15	16	17
January	10	5	2		8	6	17	17	13	5	16	12	15	5	3
February	55	6	14	9	12	16	31	29	16	22	17	24	31	10	12
March	12	3	10	8	24	4	17	15	6	12	8	14	12	3	7
April	14	8	9	1	3	6	3	13	5	5	0	4			4
May	10		1		5	3	3	8		12	1	4	2	4	2
June		1	3				1	1	1	6	1	5	2	5	1
July			3				2			4			4	1	1
August	2	4	4		4	1	4	3		2	1	8			1
September	6	3	3	1		1	1	1		4		3	2	2	1
October	3	3	8	3	4	3	8	4	6	7	3	4	7	2	2
November	15		11	2	5		2	5		2	8	3	7		6
December	24	10	9	3	7	6	4	2	8	5	5	6	9	5	10
Total	135	5	145	52	64	53	59	58	29	11	45	9	84	13	64

## EPIDEMIA MENINGITIS

1922	1	2	3	4	6	7	8	9	11	12	13	14	15	16	17
January								1							
February				1					2						
March													1		
April			1	1											
May												1			
June															
July															
August															
September															
October														1	
November							1								
December			1							1					
Total			1							5	2	1	2	1	1

## INFANTILE PARALYSIS

1922	1	2	3	4	5	6	8	9	10	11	12	13	14	15	16
January															
February															
March															
April															
May															
June										1					
July											2				1
August															
September															
October															
November							1								
December															
Total			1						1	4	3			3	2

## WHOOPIING COUGH

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1900			11	1	1		8	3	2		3	2	5	6	6	5	144
1901			3	26	2	6	8	4	2	11		8		8		6	14
1902			2	10		2	3	5	5	15	2	3		5		18	103
1903			7		3	2		9	5	18	5		4	6	3	1	1
1904			2			6	3	21	5	13	6		4	9	1	10	118
1905			18	4	2	1	3	9	8	13		6	3	28	15	6	222
1906			6		5	8		5	4	10	3	6	21	14	24	8	140
1907			5		45	1	22	7		1	8	5	18	10	42	28	116
1908			4	24		3	6		16	13	22	1	2	26	28	9	243
1909			6	1	1	2	13	16	9		8	15	10	3	2	5	248
1910			26	7			6	18	27		22	9	8	18	31	28	216
1911			5	5	1	6		10	7	8	18	3	4	3	24	1	213
1912			11	2	26	10	26	45	16	11	28	100	20	60	11	54	485

## MEASLES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1900			1	5	1	4	2	6	1	3	6	3	4	2			53
1901			5	5	6	4	8	2	1	3	5	6	6	4	4	6	243
1902			7	1	10	28	3	11	8	30		4	20	1	3	5	381
1903			41	28		38	8	8	56	44		20	36			28	557
1904			8		2	18	65	43	66	12	50	3	11	54	12	24	863
1905			2	4	53	2	34	81	54	48	27	46	6	14	2	6	900
1906			15		28		6	16	8	15	2	15		18	2	4	100
1907			1				16	8	3		2		6	16	1	3	41
1908			5	5	2			8	3	2	1					9	66
1909			5			1			4							1	54
1910			26	1			14	28	4		18			2	16	6	123
1911			6	4		8		16	2	1		5	1	2	30	20	160
1912			2		22	26	3	26	10	3	5	24	7	4	18	62	369

## DIPHTHERIA

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1900					1	4			3	3	4		4	1		2	21
1901					6	7	1	3	6	2			4	4		7	31
1902					1		7	1	2		6	1	6			3	41
1903								3	1	3			8	5		5	30
1904					4					1	3	3			1	15	51
1905					8			1		7	2	2		4	7	8	31
1906										1			2	2		4	11
1907																1	1
1908																	1
1909					4	3									2		10
1910					1									1			1
1911					2							1			1	1	16
1912					5	1	7	15	8	8	7	33	17	1	18	33	264

## DISCUSSION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
air =																	
over 30%																	
air																	
Mo			1				8										9
		2															2
					1												1
A <sub>2</sub> M <sub>2</sub> X							1								1	1	3
per air							1	1			1						3
per							1										1
N <sub>2</sub> per																	
(D <sub>2</sub> ) r <sub>2</sub>		1															1
T <sub>2</sub>		2	1		1		6	1			1				1	1	13

## TETANUS

[illegible]

## L. L. NORRHF A

1977	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1977	5	11	7	14	2	3	4	5	3	3	3	5	1	3	3	10	80
1978	9	8	5	4	5	2	6	2	1	2	5	3	1	1	3	3	55
1979	2	2	4	4	6	3	3	3	3	1	1	3	1	2	5	10	40
1980	6	4	1	5	1	2	3	5	2	1	3	5	5	1	4	3	48
1981	2	6	13	5	7	2	3	2	3	1	1	2	4	2	5	3	61
1982	5	8	6	14	6	3	6	6	1	4	2	6	6	6	3	8	84
1983	3	13	5	3	4	2	9	2	3	1	3	10	1	4	7	70	70
1984	3	3	3	1	4	6	3	2	2	2	1	4	2	2	1	35	35
1985	5	5	3	1	5	3	7	2	3	1	3	2	3	5	4	3	58
1986	1	1	9	9	5	4	6	6	6	5	6	2	4	5	8	9	93
1987	6	1	5	11	3	3	4	4	3	1	3	1	3	1	1	3	53
1988	2	1	1	2	4	2	4	1	4	1	4	2	2	2	1	42	42
1989	50	12	68	71	50	1	50	48	15	21	24	22	43	11	33	38	713



## LEAD POISONING

Year	1921	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January																		1
February																		1
March																		1
April																		1
May																		1
June																		1
July																		1
August																		1
September																		1
October																		1
November																		1
December																		1
Total		1	5	1	8		1	1	1	1		2		5		1		23

## ENCEPHALITIS LETHARGICA\*

Year	1921	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January																		1
February																		1
March																		1
April																		1
May																		1
June																		1
July																		1
August																		1
September																		1
October																		1
November																		1
December																		1
Total		1								1		1	1	2	1			10

\*Not required to be reported. There were 22 deaths.

## PORTAL SEPTICEMIA

[illegible]

## MENTAL DEFECTIVENESS

[illegible]

ΕΡΗ ΕΡΩΝ

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
January								1		1							
February											1						
March											1						
April												1					
May																	
June							1										
July						2											
August	1								1	1			1				
September						1											
October				1				1									
November																	
December																	
Total						2	1	2	2	1							4

# ANNUAL REPORT

OF THE

## Food and Drug Division

*By Charles V. Craster, Health Officer*

DEAR SIR:—I herewith submit the report of the Food and Drug Division for the year ending December 31, 1922.

Respectfully,

SAMUEL G. SHARWELL,  
*Chief Food and Drug Inspector.*

### DAIRIES

* raw dairies inspected and scored	47
" raw dairies rescored	121
" raw dairies reinspected (not rescored)	325
" pasteurized dairies scored	346
" pasteurized dairies not scored	3,104
dairies supplying milk to our thirty five creameries (Grades "A" and "B" pasteurized)	3,450

\* Of the 346 grade "A" pasteurized dairies scored, 100 dairies scored the 65 points allowed by our milk ordinance, 100 scored above the 65 points and 19 scored below the required amount. Milk from the nineteen dairies scoring below our requirement was barred from entering Newark.

### COWS

All cows producing milk to be sold as grade "A" raw, must be tuberculin tested annually, and all cows added to the herd must be retested after two months of previous test.

## DEPARTMENT OF PUBLIC AFFAIRS

## SYPHILIS

1922	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	4	15	8	8	1	5	2	2	2	3	4	1	5	1	5	2	101
February	6	5	6	5	5	3	3	2	1	4	1	2	1	3	3	4	101
March	3	3	3	2	4	2	3	1	2	1	2	1	2	4	3	3	101
April	3	4	2	1	1	5	10	4	6	2	3	1	4	4	3	2	101
May	5	8	3	5	1	5	3	3	1	1	2	3	1	3	3	3	101
June	2	6	3	5	1	2	5	3	2	2	2	2	3	5	2	2	101
July	5	11	8	6	1	2	5	3	2	2	2	2	3	5	2	2	101
August	5	11	8	6	1	2	5	3	2	2	2	2	3	5	2	2	101
September	4	8	11	8	1	4	11	3	2	4	2	2	1	6	9	3	101
October	5	11	8	2	4	5	6	3	9	3	2	2	1	6	9	3	101
November	5	11	8	2	4	5	6	3	9	3	2	2	1	6	9	3	101
December	6	6	5	11	5	5	4	4	3	1	3	1	3	1	1	3	101
December	6	6	13	10	1	3	4	3	1	1	1	1	1	1	3	3	101
Total	60	78	91	71	26	28	58	25	44	8	27	15	20	54	34	23	101

## CHANCROID

1922	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
January				1				1								2
February																1
March									1							1
April					1											1
May						1										1
June																1
July																1
August																1
September						2										2
October																1
November												1				1
December																1
Total				2	4	3	1	2	1	1		1		1		10

## INF. VENZA

1922	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
January	4	3	21	2	4	6	3	34	13	4	5	4	12	5	3	101
February	128	60	110	25	103	94	76	172	93	95	84	79	20	216	1	101
March	10	14	31	5	10	12	11	60	43	17	13	23	40	40	9	101
April	1	6	7			2	3	7	14		3	4	4	3	6	101
May	1		6						9		2				1	101
June	1					1			5	2			2	2	1	101
July	1			1	1	1		4	1	1		3	2	1		101
August					1	2	1		3	1	1		1	1	2	101
September								1	6		1	3	3	3		101
October					5	2	1	2	11	1	1	3	4	3	1	101
November	1					5	5		6	16	7	5	4	7	1	101
December	5	7	5													101
Total	152	88	390	30	133	128	94	333	27	126	120	120	86	123	93	24



When streptococci and pus were found in a second sample of milk taken, a representative of this department would make a physical examination of cows in the dairy to locate the cows with infected udders. In 90 per cent. of cases investigated, the trouble was located.

There were 3,228 sediment samples of milk taken at the thirty-five creameries shipping milk into Newark. Of this total 1,945 were clean, 1,105 were fairly clean, 120 were dirty, 41 were very dirty and 17 were filthy. When the sediment discs appeared dirty or filthy, the milk was not permitted to be shipped to Newark. 8,023 quarts of milk, both grades, "A" and "B" pasteurized, were not allowed to enter Newark from these creameries owing to the milk not being properly cooled, as indicated by the temperature tests.

In 1921 this department adopted rules stating that grade "A" milk to be pasteurized must be cooled on entering the creamery to a temperature of 50 degrees Fahrenheit or lower, and all "B" milk to be pasteurized must be cooled to a temperature of 60 degrees Fahrenheit or lower. This applies to both night and morning's milk. At first this was a difficult matter for the dairymen to adhere to, but we are now meeting with excellent results. Of the thirty-two creameries shipping milk into Newark during 1921, 9,800 quarts of milk was barred on account of the milk not being properly cooled.

Our milk ordinance specifies the amount of bacteria allowed per cubic centimeter for each grade of milk as follows:

Certified	10,000
"A" raw	100,000
"A" pasteurized	30,000
"B" pasteurized	50,000

5M. 10

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mastitis, producing streptococcus and pussy milk; a number of cows were also found affected with endometritis.

Several conferences were held with members of a medical commission and it was pointed out to them by representatives of this department that the veterinarian employed had made a thorough physical examination of the certified cows. The veterinarian would simply visit the barns and just once at the cows. In the quarantine and semi quarantine the veterinarian would pass on their fitness as to their removal to the certified barns, for the production of certified milk.

It was stated by the members of this commission that the practice now existing in the examination of cattle would cease and that each cow would be physically examined once a month as required by law.

#### MILK SAMPLES

It is the custom of this department to take milk samples in triplicate. One sample bottle of milk (8-oz. size) is analyzed by the food and drug laboratory, and if found to be below the legal standard, a duplicate sample is submitted to our chemist, the third sample is given to the storekeeper. If he desires to have the sample analyzed by a chemist he selects, he has the privilege of doing so, for verification.

On an average of four bacterial samples of milk are taken each month from each dealer. Two preliminary chemical samples are taken and submitted to our chemist for analysis; if these samples are found below the standard, they are followed up by taking sealed samples.

For milk samples containing added water, a fine of \$50.00 is imposed upon the violator, and if a sample is found below the legal standard, a fine of \$15.00 must be paid within 15 days of receipt of the notice sent offender, otherwise the fine

These are the requirements of our ordinance. Cows checked up upon every inspection of a dairy from which milk is sold in the city of Newark. As means of identification, all cows are tagged.

Cows checked up during the year 1922, 7,784.

Out of 3,549 cows tuberculin tested, 88 were reactors, 2 1/2 %. The largest percentage of reactors were found when cows were added to a herd.

#### TABLE OF MILK EXAMINATIONS

Scaled chemical samples taken by the Food and Drug Division
Scaled chemical samples below legal standard.....
Bacteria, samples taken.....
Bacteria, samples within required amount.....
Preliminary samples taken and analyzed in Food and Drug Laboratory.....
Pre-inary samples within required amount.....
Sediment tests taken at creameries.....
Temperature tests taken at creameries (both night and morning).....
Sediment tests taken at Food and Drug Laboratory.....
Sweet and sour cream samples taken and analyzed in Food and Drug Laboratory.....
Sweet and sour cream samples below legal standard.....

Of the 3,195 bacterial samples of milk taken, 51 were found to contain streptococci and pus. Where streptococci and pus are found in a sample of milk, this department calls the dairyman to immediately employ the services of a veterinarian to locate the cows with infected udders. Cows found infected, are isolated, and their milk not used for human consumption until found free from infection. In rare cases has a second sample of milk taken from cows which were infected been found to contain streptococci and pus. Of the 43 special samples analyzed, 21 were found to contain streptococci and pus.

Of the 557 food and drug samples obtained, 20 were analyzed by the United States Department of Agriculture for the purpose of interstate shipments, and the balance by our chemist and bacteriologist.

#### MISCELLANEOUS SAMPLES TAKEN IN CONJUNCTION WITH STATE INSPECTOR

Butter samples	6
Cocoa samples	3
Baking powder samples	2
Meat samples	4
Live oil samples	6
Air tonic samples	6
Mineral samples	2
Tea samples	11
Sealed milk samples	56
Syrup samples	3
Mineral water samples	5
Hardine samples	2
Total	110

Good work has been accomplished in the collection of these samples with the State Inspector. Legal proceedings were instituted against establishments not meeting with the requirements of the state Sanitary Act and Sanitary Code.

The following condemnations were made as being unfit for human consumption:

#### FOODS (OTHER THAN MEAT)

122 quarts cherries	45 cocoanuts
1,160 pounds macaroni	140 pounds flour
93 pounds cheese	47 cans apricot jam
908 cans pork and beans	514 cans molasses
634 pounds corn meal	50 pounds sugar
35 bottles olives	150 pounds butter
2 barrels cabbage	1 barrel carrots
715 watermelons	83 dozen eggs
90 packages cocoanut	75 cans tomatoes

## MILK AND CREAM LICENSES

Wagon licenses issued.....	400	\$ 800
(These 400 wagon licenses issued, total 178 retail milk dealers)		
Store licenses issued.....	1,210	2,420
Dealers handling more than one grade of milk.....	106	
(A fee of 50c is charged for each additional grade of milk handled)		
Cream licenses for wagons and stores issued.....	569	284
Total .....		\$3,550

PENALTIES PAID FOR SAMPLES OF MILK BELOW  
LEGAL STANDARD

Milk Samples .....	\$4
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INSPECTIONS MADE OF CAN AND BOTTLE MILK  
RECEIVED OVER THE DIFFERENT RAILROADS FROM  
THE THIRTY FIVE CREAMERIES SHIPPING  
MILK INTO NEWARK

Erie railroad platform.....	12 inspections
Centra. railroad platform.....	14 inspections
Lackawanna railroad platform.....	8 inspections
Lehigh Valley railroad platform.....	15 inspections

These inspections were made to determine if the milk was properly cooled, and that the cans and bottles were properly cleaned on return to the creameries. Upon taking the temperature of the milk, if it did not meet with requirements, it was shipped back to the creameries; no milk cans were allowed to be returned to be refilled.

## CERTIFIED DAIRIES

Close observation was made of the five dairies shipping certified milk into Newark. Three of these dairies are located in New Jersey and the other two are located in New York State. Three of these places were found not complying with the State ruling governing the production of milk. On various inspections made of said premises, cows were found after

Restaurant approval certificates issued (scored over 80%)	391
Inspection of stores for milk licenses	1,288
Ceries inspected	287
Ceries reinspected	1,003
Cheese plants inspected	6
Cold water plants inspected	25
Cold water plants reinspected	146
Cream plants inspected	85
Cream plants reinspected	238
Wholesale grocery plants inspected	7
Wholesale pretzel bakeries	4
Macaroni shops inspected	33
Macaroni shops reinspected	109
Food exposures	909
Confectionery stores inspected	493
Confectionery stores reinspected	1,043
Grocery stores inspected	430
Grocery stores reinspected	1,110
Egg candling plants inspected	5
Egg candling plants reinspected	9
Delicatessen stores inspected	221
Delicatessen stores reinspected	943
Dug stores inspected	102
Dug stores reinspected	606
Local milk pasteurizing plants inspected	5
Local manufacturing plants inspected	7
Local manufacturing plants reinspected	27
Public water fountain inspections	178
Public water fountain reinspections	315
Food establishments inspected	58
Alcohol manufacturing plants inspected	6
Alcohol stores inspected	89
Alcohol stores reinspected	252
Cases sent to creameries to be distributed to dairymen about cooling of milk	3,796
Cases served (miscellaneous)	5,321
Food carrier's photograph sent to dairymen shipping and selling milk in the City of Newark	4,743

Foodstuffs have been inspected weekly, during the year in the following public institutions. Most of the cans on hand in these institutions were analyzed by the

totals \$25 00. Seven and sweet cream samples found to be the standard samples taken the same as milk the violation is compelled to pay a penalty of \$25 00.

## MILK BOTTLES

A number of milk bottles claimed to be sterilized by dealers having high bacterial counts in the grade "A" raw milk serve in Newark were examined. Distilled water was placed in the bottles and plated for growth. Ninety per cent. of bottles plated indicated that the cause of the high bacterial counts were not from the milk but from the bottles not properly sterilized.

## MISCELLANEOUS SAMPLES TAKEN

Butter samples	
Meat samples	
Soda samples	
Olive samples	
Soda water samples	
Vinegar samples	
Sour and sweet cream samples	
Bread samples	
Buttermilk samples	
Sardine samples	
Citrate magnesia samples	
Ice cream samples	
Landy samples	
Oyster samples	
Honey samples	
Condensed milk samples	
Mayonnaise dressing samples	
Coffee samples	
Sugar samples	
Fruit extracts (soda water)	
Salt samples	
Lemonade samples	
Root beer samples	
Sangvin (blood tonic)	
Iodine samples	
Cider samples	
Total	122
	1160
	93
	908
	34
	35
	2
	715
	61



# VIOLATORS APPEARING AT FOOD AND DRUG HEARINGS

Milk dealers appeared at hearings for milk violations	94
Milk dealers reappeared at hearings for milk violations	96
Milk dealers summoned to appear at hearings for milk violations, but failed to appear	16
Food exposure violators appeared	187
Retail proprietors, butchers, grocers and bakers, appeared regarding violations of State Sanitary Act and Sanitary Code	143
Milk dealers who had licenses revoked to sell milk because of adulteration of milk and since called	17
Persons barred from selling milk, owing to a case of measles, diphtheria and a typhoid carrier existing on premises	3
Of the 174 retail milk dealers in business, 38 have discontinued on their own accord.	

Total number appeared at meetings 514

## COURT CASES

Cases turned in for suit	70
Cases fined	4
Cases discontinued on payment of cost of court	50
Cases pending	13
Businesses not served (violators out of business)	3
13 soda water samples contained saccharin; these cases are pending. 1 milk dealer was fined \$5.00, plus cost of court of \$1.85. 1 milk dealer was fined \$15.00, plus cost of court of \$1.85; 1 milk dealer was fined \$50.00, plus cost of court of \$1.85.	

These three violators sold milk without first obtaining a license to do so. 1 restaurant proprietor was fined \$10.00, plus cost of court of \$1.85 owing to the unsanitary condition of premises. Food exposure violators, bake shop and restaurant proprietors and mineral water dealers, these cases were dismissed (50) with the payment of cost of court of \$1.85. Total fines, \$179.50.

Summonses served and warned by court to comply with orders of the Health Department immediately, or legal action would be instituted.

20 pounds citron	112 bushels beans
22 quarts blackberries	2 barrels potatoes
1850 quarts strawberries	2 crates tomatoes
55 crates canteloupes	85 cans spinach
25 barrels apples	3,200 bottles soda water
78 quarts lemonade	148 quarts lemon-ice
20 quarts cherry ice	3968 pounds candy
768 quarts milk	205 6-oz. bottles medicine
905 pretzels	21 crates peaches
25,611 cans condensed milk	699 ¼-pound cans chocolate
4 barrels pineapples	4 crates plums
6 dozen lemons	125 pounds figs
1,200 pounds prunes	1 barrel escorial
1,100 pounds St. John's bread	1 barrel onions
1595 pounds chestnuts	550 pounds cake
3 crates oranges	75 loaves bread
10 gallons ice cream	64 pounds sugar
375,649 pounds grapes	

## MEAT, POULTRY AND SEA FOOD

25 pounds herring	10 pounds white fish
15 pounds salmon	16 pounds weak fish
10 pounds bluefish	5 cans shrimp
202 chickens	98 turkeys
3 pairs rabbits	125 pounds scrap meat
4 smoked hams	8 pounds pork chops
25 pounds bologna	225 pounds fresh ham

## FOOD SUPERVISION

The following is a list of activities under this head:

INSPECTION MADE OF ESTABLISHMENTS WHERE  
FOOD WAS PREPARED AND SOLD, FOR THE PURPOSE  
OF ENFORCING THE STATE LAW AND SECTION  
THE SANITARY CODE CONCERNING FOOD

Centre Market inspections  
Butcher shops inspected  
Butcher shops reinspected  
Restaurants inspected and scored  
Restaurants reinspected

# RETAIL VIOLATORS APPEARING AT FOOD AND DRUG HEARINGS

Rest. dealers appeared at hearings for milk violations	54
Rest. dealers reappeared at hearings for milk violations	90
Milk dealers summoned to appear at hearings for milk violations, but failed to appear	16
Food exposure violators appeared	167
Restaurant proprietors, butchers, grocers and bakers, appeared regarding violations of State Sanitary Act and Sanitary Code	143
Milk dealers who had licenses revoked to sell milk because of violations of mil' ordinance (all rescinded)	17
Dealers barred from selling milk, owing to a case of measles, diptheria and a typhoid carrier existing on premises	3
Of the 174 retail milk dealers in business 38 have discontinued on their own accord	

Total number appeared at meetings 514

## COURT CASES

Cases turned in for suit	70
Cases filed	4
Cases discontinued on payment of cost of court	50
Cases pending	13
Summonses not served (violators out of business)	5

13 socal water samples contained saccharin, these cases are pending. 1 milk dealer was fined \$500, plus cost of court of \$1.85; 1 milk dealer was fined \$1500 plus cost of court of \$1.85; 1 milk dealer was fined \$50.00, plus cost of court of \$1.85.

These three violators sold milk without first obtaining a license to do so. 1 restaurant proprietor was fined \$10.00, plus cost of court of \$1.85, owing to the unsanitary condition of premises. Food exposure violators, bake shop and restaurant proprietors and mineral water dealers, these cases were dismissed (\$50) with the payment of cost of court of \$1.85. Total fines, \$179.50.

Quick summonses served and warned by court to comply with rulings of the Health Department immediately, or legal action would be instituted.

United States Department of Agriculture, and found a whole to be of good quality. All other foodstuffs served except in a few instances, were also fit for human consumption:

Alms House, Ivy Hill, N. J.  
Boys' Home, Verona, N. J.  
City Hospital, Newark, N. J.

### PLACES FOUND TO BE O. K. AFTER INSPECTION MADE AND NOTICES SERVED

Wholesale grocery stores  
Food exposures  
Bakeries  
Ice cream plants  
Macaroni shops  
Confectionery stores  
Egg candling plants  
Delicatessen stores  
Seafood establishments  
Wholesale candy manufacturing plants  
Local milk pasteurizing plants  
Dairy stores  
Restaurants  
Butcher shops  
Soda water plants  
Drug stores  
Cheese plants  
Food stands in Centre Market  
Wholesale grocery plants  
Retail grocery stores  
Bologna plants  
Milk bottling plants  
Milk dealers discontinued using improper bottle caps  
Dairies, grades "A" raw and "A" pasteurized

Total

## APPROVAL OF DRUG VENDERS' LICENSES

No licenses are granted to vendors who desire to offer foodstuffs or patent medicines for sale in the City of Newark until approved by this department, this being the understanding with officials of our License Department.

When a person desires to place a medical remedy on the market, a written statement must be submitted and sworn to by a notary public, and a sample of the remedy submitted. When a medicine is an inter-state shipment, the United States Department of Agriculture, Bureau of Chemistry, is consulted and a sample is sent for analysis. Through this co-operation a good deal of fraudulent drugs are kept off the market.

Five hundred forty six bottles of a blood tonic were seized and the manufacturer compelled to re label this entire amount, owing to the tonic not containing the ingredients as specified on label; 247 bottles of flavoring extracts seized had to be relabeled, due to the fact that a different label was on the same flavoring extract; for instance a bottle of strawberry extract, one bottle would be marked as strawberry and the same flavoring extract would be marked raspberry.

## TYPHOID FEVER

On October 5, 1922, a report was received from the Contagious Disease Division of this department that there were seven cases of typhoid fever existing in families who purchased milk from the one dairy. An inspection was made of this dairy and widal, nose and throat, urine and feces samples were taken of the four employees. The milk was permitted to be sold if pasteurized, until the matter was further investigated.

The State Department of Health was notified of the outbreak. Feces samples were again taken by a representative



## TYPHOID CARRIER

This man is not to be employed at any dairy or other food-handling establishment



Tony La Bella, alias Frank Boni Color, white. Age, 39 years. Height, 5 feet 10 inches Weight, 175 lbs. Robust build. Eyes, hazel brown. Hair black, gray streaked. Complexion, ruddy. Mustache, brown. Born in Italy Occupation laborer. High receding forehead.





## DEPARTMENT OF HEALTH

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## A—RAW SAMPLES

DEALER	PRODUCER	Age of Samples Taken	Percentage Above 3% Skatol	Number of Samples	Count of Year	Maximum Number Taken	Average Fat	Average T in Skatol
Borden's	Eastville N. Y.	12	0	2	166	4	8.80	12.37
Krug, Wm.	M. Salna	1	0	3	00	1	8.60	12.8
Heenan, Frank	V. Drake	5	0	8	750	2	8.75	12.8
Klema, Anna	Own	20	0	15,650	10	3.33	12.24	
Fairfield Dairy	Own	18	1	17,333	10	3.33	12.18	
Kantor, Philip	Fred Kreuger	13	0	28.83	9	3.49	12.27	
Celvin, H.	L. Bernsky	3	0	20,000	1	3.60	12.65	
Dolan, P.	Own	2	0	21,900	1	3.76	12.59	
Rosenblum, J.	N. Drake	8	0	21,751	4	3.57	12.15	
Haer, E.	Own	16	1	24,163	8	2.88		
Hend, I.	Own	20	1	28,350	10	3.84	2.88	
Oyler, A.	L. Dragan	3	1	33,363	2	3.00	12.7	
Weinman, Chas. L.	Borinsky	4	1	37,000	2	3.00	12.15	
Noll, Leroy	H. Pollock	0	1	37,350	10	3.47	12.14	
Hanap, Max	H. Pollock	24	1	37,54	11	3.72	12.17	
Sumner, F. J.	H. Weinberg	4	0	38,750	2	3.35	11.00	
Krebs, C.	J. Borinsky	4	0	41,250	2	3.28	12.12	
Wefel, Wm.	M. Sack	4	1	41,250	2	3.50	12.27	
Kreuger, E.	Own	0	1	42,110	0	3.65	12.17	
Jacob, Fred	M. Scherzman	17	1	42,383	6	3.47	12.7	
Hend, I.	Own	2	1	42,200	10	3.60	12.15	
Kantor, P.	V. Zitrinsky	4	0	42,550	2	3.93	12.16	
Nawack, R.	F. Nawack	4	0	43,500	2	3.93	11.20	
Goldsberg, H.	Own	24	2	42,635	13	4.37	13.3	
Lewis, Abe.	Own	20	2	42,650	5	4.01	13.06	
Webel, M.	Own	20	1	43,150	5	3.74	12.17	
Bush, H. J.	F. Nowack	4	1	45,750	3	3.33	12.71	
Campbell, J.	H. Weinberg	5	1	44,500	4	3.16	12.07	
Gold, H.	F. Nowack	1	1	45,000	1	3.60	11.95	
Campbell, H.	H. Weinberg	20	1	45,500	10	3.50	12.50	
Fer, George	Own	16	1	46,688	8	3.6	12.46	
Staeger, Chas.	J. Dealer	6	0	47,500	4	3.45	12.22	
Fer, Samuel	Own	12	2	47,916	4	4.00	12.13	
Goss, M.	Own	24	3	48,750	11	3.40	11.76	
Kreuger, Wm.	H. Frankman	4	1	48,750	2	3.50	12.18	
Friedman, I.	F. Nowack	1	0	50,000	0			
Sobel, Chas.	V. Drake	1	0	50,000	1	3.40	11.77	
Radow, Benj.	H. Pollock	8	1	50,000	4	3.48	12.29	
Martinez, S.	M. Scherzman	6	1	51,562	8	3.45	12.06	
Sennat, Wm.	H. Pollock	16	2	53,500	8	3.40	12.14	
Hoffman, W.	H. Pollock	20	1	55,750	10	3.78	11.75	
Szyer, H.	J. Feris	28	2	56,035	14	3.77	12.63	
Becker, H. & Son.	Own	24	3	57,916	12	3.90	12.60	

of the State, of the four persons employed at the dairy Mr. Tony La Bella, employed as a milker and bottle washer, was recognized by the State Representative as being a typhoid-carrier. The milk from this dairy was barred until the premises were disinfected. Mr. La Bella was urged to wait at a certain place and was then placed under arrest, and sent to the City Hospital for observation.

Mr. La Bella was fined \$100.00 in the district court here for working in dairies after the State warned him at various times not to do so. This individual has secured a position with a New York Stone concern, as a laborer. The New York health authorities have been notified and Mr. La Bella is reporting to them weekly.

The State Department of Health reported there were 72 known cases and 3 deaths from typhoid were caused by Mr. La Bella at an orphan asylum in Morris County from June to September, 1921.

In addition to the seven cases of typhoid fever first reported, there were 35 known cases and 3 deaths in Newark from September to December, 1922, caused by this man.

There has been 4,543 circular photographs of Mr. La Bella similar to the following sent to dairymen shipping and serving milk in the City of Newark.

DEALER	PRODUCER	Bacterial Samples Taken	Racterial Samples Above the Standard	Average No. of Bacteria per Year	Chemical Samples Taken	Average Fat	Average Total Solids
Mizwa, J.	Sam. Ter	11	4	147,727	5	3.93	12.28
Treusch, Conrad	M. Samick	24	11	158,873	10	3.53	12.17
Feins, Joseph	M. Levine	4	2	160,000	2	2.95	*11.46
Stroepel, Wm.	M. Levine	16	5	167,500	8	3.82	12.11
Kaplan, M.	M. Levine	12	3	171,250	6	3.77	12.11
Gelen, Jacob	S. Scherkman	20	7	174,000	10	3.18	11.68
Engelman, Jos.	Stenberg & Healer	13	2	181,23	7	3.31	11.92
Trans, N.	Clas. Sedden	13	6	157,308	7	3.30	11.92
Karal, H.	H. Weinberg	16	3	213,125	8	3.38	11.77
Ross, H.	M. Samick	19	7	213,947	10	3.32	12.03
Frank, W. H.	M. Schenkman	16	4	216,875	8	3.79	11.76
Kir, Philip	H. Clemmick	4	3	224,000	2	3.80	11.91
Eberhardt, F.	M. Levine	3	1	235,000	2	4.20	13.04
Sodono, Anthony	L. Borinsky	27	11	243,450	13	3.18	11.85
Schaeffer, John	P. Feins	4	2	295,000	7	2.78	*10.91
Weiss, C.	M. Schenkman	7	2	390,000	4	3.23	11.67
Phil, A.	P. Feins	20	2	562,25	10	3.55	12.25
Webster, J. H.	P. Newark	4	2	634,750	2	3.10	12.03
Rappaport, M.	C. Feins	4	4	662,500	2	3.50	11.44
Frederick, D.	Ow.	5	3	705,000	3	3.92	12.47
Bridgman, J.	M. Schenkman	8	2	1,117,000	3	2.42	*11.63

## A PASTEURIZED SAMPLES

Bergen's	Brooklyn, N. Y.	6	0	1,500	2	1.50	12.05
Bergen's	Washington, N. Y.	12	0	1,750	6	3.44	12.01
Bergen's	Pinebush, N. Y.	4	0	2,500	2	1.70	12.33
Scarod, F.	Model Dairy Co.	24	0	3,333	11	1.52	11.96
Smith, Alex.	Model Dairy Co.	20	0	7,150	10	3.46	11.88
Weiss & Cranstford	Model Dairy Co.	8	1	8,500	4	1.63	12.29
Borden's	Boston, N. Y.	30	0	8,500	9	3.41	11.92
Hartlaub, F.	I. Dwor	1	0	10,000	1	3.90	12.98
Weisman & Babes	Model Dairy Co.	4	0	10,250	2	3.30	11.89
Borden's	Oxford, N. Y.	4	0	11,250	2	3.75	11.79
Geis, F.	F. W. Tanssen	4	0	15,000	2	3.23	11.63
Newark Milk and Cream Co.	Own	24	3	21,133	13	3.86	12.44
Patfield Dairy Co.	Own	20	5	22,305	9	3.54	12.06
Moore, Leonard	Grange Dairy Co.	10	6	24,100	10	3.32	11.94
Buckholz, F. C.	F. W. Tanssen Co.	23	6	25,16	11	3.58	11.99
Woodbrook Farms	Own	24	3	28,503	12	2.53	11.94
Bales, L.	Wm. Provost, Ind.	8	3	30,625	4	3.37	11.56
Seeba, Jas.	F. W. Tanssen Co.	28	12	40,357	14	3.47	11.77
Luba, J.	F. W. Tanssen Co.	16	7	49,937	6	3.57	11.82
Woodruff, L.	F. W. Tanssen Co.	27	10	55,185	14	3.60	12.11
Becker, H. & Son	Own	24	11	57,333	7	3.45	11.93

## DEPARTMENT OF PUBLIC AFFAIRS

RESULT OF MILK SAMPLES TAKEN AND ANALYZED  
SPECIAL SAMPLES NOT COUNTED IN THIS TABLE  
BACTERIAL ANALYSIS

GRADE	Total No. Bacterial Samples Taken	Average Bacterial Count	Bacterial Samples Above Required Amount	No. of Days
Certified	65*	6,598	0	4
A Raw	1,498*	116,421	233	17
A Pasteurized	381*	34,664	97	25
B Pasteurized	1,251*	71,068	295	89
	3,195		631	229

\* A sediment test was made of each of these 1,195 samples.

## CHEMICAL ANALYSIS

GRADE	Total No. Chemical Samples Taken	Average Fat Content	Average Total Solids	No. of Days
Certified	33	4.08	12.70	5
A Raw	742	3.52	12.16	45
A Pasteurized	181	3.53	12.04	4
B Pasteurized	397	3.43	11.88	18
	1,353			92

## SAMPLES TAKEN IN 1922

DRAILER

PRODUCER

## CERTIFIED SAMPLES

DRAILER	PRODUCER	No. of Samples Taken	No. of Samples Above Required Amount	Average Bacterial Count	Average Fat Content	Average Total Solids
Borden's	Green N Y	8	0	3,325	4	12.32
Borden's	East N Y	12	1	3,250	6	12.38
Wagon Farm	Oswego	24	2	4,893	12	12.05
Farfield Dairy	Oswego	4	1	9,200	3	11.47
Yark Milk and Cream Co.	Maker Garden	16	0	11,625	8	12.66

DEALER	PRODUCER	Box, a 1 qt.	Back via sample above the S. and C.	Average Box, a 1 qt. net for year	Number Samples Taken	Average Fats	Average Total Solids
Burkholz, F. C.	Geo. Clark	18	4	37,689	7	3.31	11.96
Gaub, J.	C. W. Vanatta	28	5	39,214	13	3.19	11.92
Henschowitz, M.	C. A. Vanatta	24	5	39,558	12	3.34	11.80
Haug, Fred	W. Vanatta	24	8	40,660	12	3.44	11.84
Scharago, H.	P. Amboy Milk Co.	21	7	43,000	17	3.48	11.94
Fischman, Wm.	C. Squares	27	8	43,000	13	3.42	11.43
Klappholz, P.	C. Squares	24	3	43,000	13	3.42	11.87
Bunger, F.	Wm. Provost, Inc.	21	5	51,450	8	3.40	11.75
Searth & Ross	C. W. Vanatta	8	1	52,000	4	3.20	12.00
Schroeder, E.	E. C. Wyckoff	7	1	53,000	5	3.50	12.11
Spitzer, R.	C. Squares	15	4	53,066	8	3.47	11.95
Feuman, Abe	Interstate Milk Co.	5	2	54,200	1	3.67	12.12
Leiner, Thas.	P. Amboy Milk Co.	8	2	54,625	4	3.46	11.78
Spicer, Nathan	C. W. Vanatta	27	5	55,400	1	3.43	11.90
Shenback, S.	C. Squares	4	1	55,750	2	3.41	12.09
Henschowitz, M.	C. Squares	24	6	58,875	11	3.43	11.87
Newark Milk Co.	Jersey Milk and Cream Co.	17	6	59,666	6	3.71	12.27
Pierce, Geo.	Dairymen's League	34	6	60,833	12	3.82	12.25
Rainor, Max	C. Squares	12	3	61,333	6	3.37	11.71
Lupa, T.	Interstate Milk Co.	20	4	62,400	10	3.49	11.97
Seelig, E.	I. A. Janssen Co.	24	8	63,331	10	3.61	11.19
Mesman, A.	Dairymen's League	11	1	61,636	4	3.32	11.81
Clinton Milk Co.	W. Vanatta, N. J.	12	2	65,000	6	3.65	12.27
Feins, Jos.	E. C. Wyckoff	13	5	65,154	7	3.74	12.77
Provost, Wm. Inc. Own		24		66,500	10	3.38	11.78
Max, Abraham.	Jersey Milk and Cream Co.	7	0	66,950	9	3.58	11.31
Bunger, F.	Dairymen's League	12	3	68,000	5	3.60	12.17
Westman & Babes	C. W. Vanatta	4	2	71,000	2	3.40	11.85
Tunison, J. R.	E. C. Wyckoff	20	6	71,600	10	3.56	12.11
Harrington Dairy	Interstate Milk Co.	6	6	71,437	7	3.70	12.46
Flynn, P.	C. W. Vanatta	20	7	74,700	10	3.38	11.96
Stahl, G. C.	C. Squares	4	3	76,250	2	3.50	12.10
Stokely, B.	Clinton Milk Co.	4	3	77,500	2	3.35	11.84
Naroden, J.	P. Amboy Milk Co.	24	8	79,416	7	3.31	11.69
Wolf, Chas.	Clinton Milk Co.	1	1	80,000	1	3.44	11.93
Hofacker, Chas.	C. W. Vanatta	20	7	81,711	10	3.37	11.87
Freeman, I.	Dairymen's League	7	3	87,416	6	3.65	12.18
Masino, Jatsy	Dairymen's League	20	6	86,300	9	3.66	12.31
Beardsley, W.	Jersey Milk and Cream Co.	20	7	91,850	10	3.61	12.24
Newark Milk and Cream Co. Own		24	3	102,083	10	3.59	12.12
Gorden's	Brantville, N. J.	20	3	111,957	10	3.53	12.01

## DEPARTMENT OF PUBLIC AFFAIRS

DEALER	PRODUCER	Bacteria in Lbs.	Bacteria in Lbs. Above the Standard	Average Bacterial Count for Year	Chemical Taken	Average Yards	Average Pounds
Thomas Abe	L. Horvaky	16	3	58,437	3	2.55	1.20
Young Ed.	Geo. Hastings	21	4	59	3	3.4	1.0
Kantor Philip	P. Kelly	8	1	59,175	4	3.5	1.0
Owen Ed.	El. Weinberg	16	1	67,000	8	3.41	1.04
Polack H.	Owen	18	3	67,250	10	3.4	1.0
Porter Geo.	Owen	20	4	67,450	10	3.76	1.05
Decker J.	Owen	9	1	67,444	4	3.76	1.05
Spicer Chas.	Owen	2	1	67,000	2	3.50	1.00
Staley Arthur	Owen	12	1	65,800	6	3.28	1.0
Holt, Joe	El. Weinberg	22	2	63	12	3.51	1.11
Schmidt, J. H.	W. Jarvis	11	2	69,272	6	3.58	1.25
Sonnag, Frank	P. Feas	20	2	67,650	10	3.68	1.2
Kear Harry	W. Lewis	8	0	70,000	4	3.41	1.01
Forst, Herman	M. Lewis	3	3	74,000	10	3.1	1.18
Wolf, Joseph	Owen	20	1	71,850	2	3.45	1.09
Crump, J.	Geo. Hastings	2	1	1,650	2	3.38	1.05
Enders, Albert	H. Weinberg	4	0	75,000	2	3.45	1.15
Frick Bros.	Owen	21	3	77,500	10	3.46	1.19
Harshb. Fred	Geo. Hastings	6	3	85,112	8	40	1.19
Scheute, M.	P. Feas	20	2	85,400	10	3.48	1.2
Marcedo, J.	P. Feas	8	1	86,475	4	3.29	1.1
Trana, N.	M. Sanak	3	1	90,000	1	3.45	1.15
Pagibany, M.	Hendler & Stenberg	21	6	91,894	10	3.61	1.2
Ernst, Peter	Owen	10	4	92,750	6	3.53	1.2
Moser El.	M. Salica	24	6	97,507	11	3.39	1.15
Zemler, F.	V. Zimmerack	6	2	98,650	4	3.16	1.04
Grande Chas.	Owen	24	4	99,800	12	3.16	1.04
Montan, A.	M. Schenkman	3	1	100,700	6	3.13	1.04
Knox Wm.	H. Weinberg	15	2	107,416	6	3.17	1.04
Flaccus, A.	H. Weinberg	20	4	101,300	10	3.24	1.17
Weinshuler, Chas. Jas. Sedden	Chas. Golden	14	2	111,363	5	3.10	1.04
Cassino, F.	Chas. Golden	8	2	101,333	3	3.60	1.29
Fischer F. Y.	Geo. Kolach	8	2	105,000	3	3.27	1.17
Amst. John	Owen	20	4	108,000	10	3.1	1.04
Schmidt, H. H.	H. Poleck	11	2	114,363	7	3.20	1.04
Bals Ben	M. Schenkman	6	2	112,500	6	3.24	1.04
Hottel, D.	P. Feas	12	2	112,500	6	3.24	1.04
Kraeger Gas	Owen	20	6	123,260	10	3.21	1.04
Becker Herman	Owen	6	1	128,333	4	3.15	1.04
Patt, G.	Abramson	28	4	128,607	14	41	1.04
Weinstein, H.	H. Weinberg	20	4	137,500	0	3.80	1.24
Wolf Carlsba.	Owen	20	4	137,807	1	3.67	1.11
Moore Philip	N. D. Sker	24	6	141,250	6	3.41	1.04
Ruchner, Max	L. Borsky	20	4	142,200	9	3.15	1.04
Martens, John	Owen	20	4	142,200	9	3.15	1.04

BUREAU OF VETERINARY MEAT  
INSPECTION

*Dr. Charles V. Craster, Health Officer.*

DEAR SIR: I herewith submit report of the Veterinary Bureau for the year ending December 31, 1922.

Respectfully,

WERNER RUNGE,

*Chief, Veterinary Meat Inspection Bureau.*

Great improvements have been accomplished by several changes in the method of carrying on the meat inspection: (1) All animals killed at the abattoirs are killed and dressed in the presence of a meat inspector and when found wholesome, are stamped, according to the rules and regulations of the new meat ordinance. (2) All carcasses killed without the jurisdiction of the Department of Health (mostly country dressed), except those carrying a stamp of the United States Bureau of Animal Industry, are required to be taken to an inspection station and examined by an inspector, who stamps all meat found fit for human consumption. (3) All meats and meat products furnished to the Public Institutions (City Hospital, Ivy Hill Almshouse and the City Home, Verona) are inspected and passed upon by this department before they are accepted by those institutions. (4) All peddling of meats or meat products, or fish, is prohibited on the public streets in the City of Newark.

Again, I heartily recommend the establishment of a municipal abattoir where all killing and dressing of animals for human consumption shall be done under a constant and perfect supervision.

The following is the summary of the activities of this division during the year of 1922.

## DEPARTMENT OF PUBLIC AFFAIRS

DEALER	PRODUCER	No. of Samples Taken	No. of Samples Accepted	Average Bacterial Count per Gallon	Number Samples Taken	Average Bacterial Count per Gallon	Average Total Solids
Sect's F	W. Janssen Co.	34	13	88,160	11	3,58	12.7
Excess, Wm. Van Oen		24	14	76,768	10	3,46	12.79
Wolf Chas.	F. W. Janssen Co.	1	1	100,000	1	4.00	12.7
Emelich, S.	Morgan Dairy Co.	12	2	180,000	6	3.30	12.0

## B. PASTEURIZED SAMPLES

Larny Patrick	Dairymen's League	4	0	2,000	2	1.80	12.35
Lerner Chas.	C. W. Vanatta	4	0	3,000	2	3.43	11.8
Borden's	Waterville N. Y.	2	0	4,571	1	3.47	9.5
Borden's	Ottaville, N. Y.	20	0	5,450	10	3.47	12.7
Duch's	Montrose Pa.	12	0	6,083	6	3.66	12.35
Zimmerman, R.	C. Squares	16	6	7,062	8	3.52	12.7
Boris, Wm.	C. W. Vanatta	16	1	8,000	8	3.52	12.7
Jenns, H.	P. Amboy Milk Co.	3	0	11,350	2	3.55	12.7
Rosenbloom, J.	F. W. Janssen Co.	4	0	11,350	2	3.55	12.7
Grelack, F.	C. W. Vanatta	8	0	11,350	2	3.55	12.7
Wojtech, Jos.	C. W. Vanatta	12	1	14,353	5	3.61	12.7
Dabes, L.	C. W. Vanatta	5	0	15,000	3	3.23	12.7
Mazza, Jos.	Clinton Milk Co.	16	1	15,812	8	3.60	12.75
Worner, E.	P. Amboy Milk Co.	13	1	16,384	7	3.60	12.75
Bauer, Chas.	State Milk Co.	1	1	20,000	2	3.61	12.75
Sobel, Chas.	Amboy Milk Co.	8	1	21,000	4	3.68	12.75
Weiss & Crastnopol	P. Amboy Milk Co.	24	1	24,375	12	3.40	12.75
Packowitz, S.	C. W. Vanatta	4	1	24,375	2	3.45	12.75
Murphy, John	C. W. Vanatta	24	3	25,416	12	3.76	12.77
Dairymen's League	Own	31	4	25,711	10	3.78	12.79
Kerner, Wm.	C. W. Vanatta	16	4	27,000	8	3.67	12.78
Woodruff, J.	Dairymen's League	20	3	28,000	9	3.71	12.77
Schmidt, G. P.	Dairymen's League	8	2	28,000	4	3.73	12.07
Radley Ben	C. W. Vanatta	20	2	28,850	9	3.61	12.78
Kozma, Geo.	E. C. Wyckoff	24	5	29,416	12	3.78	12.77
Emmerich, A.	Dairymen's League	24	4	29,000	10	3.44	12.03
Emmerich, Ale.	C. W. Vanatta	1	1	30,000	1	3.71	12.70
Kaplan, I.	C. W. Vanatta	20	2	30,450	17	3.33	12.0
Lemmerman, S.	Own	27	5	30,660	10	3.41	11.88
Kaplan, J.	C. W. Vanatta	27	5	32,200	10	3.58	11.80
Kaplan, J.	P. Amboy Milk Co.	31	3	32,200	7	3.45	12.0
Smith, Alex.	C. W. Vanatta	16	2	33,125	8	3.56	12.76
Paul, G.	Clinton Milk Co.	2	1	33,345	8	3.45	11.92
Thiel, P.	C. W. Vanatta	14	3	34,060	7	3.44	11.98
Moore, Philip	C. W. Vanatta	10	3	34,060	6	3.58	12.01
Cohen, A.	C. W. Vanatta	10	3	34,060	1	3.70	12.18
Larny Patrick	Dairymen's League	10	2	35,000	3	3.58	12.12
Kaplan, M.	Dairymen's League	5	1	35,000	3	3.58	12.12
Westman, H.	C. W. Vanatta	4	1	37,000	2	3.40	12.55
Kretz, C.	P. Amboy Milk Co.	4	1	37,000	2	3.40	12.55



ANNUAL REPORT

OF THE

**Chemist**

DEALER	PRODUCER	Factoria Samples taken	Bacteria Sample, Average the Specimens	Average Bacteria Count per Gall	Critical Saccharin Factor	Average Fat	Average Solids
Seesig, Chas.	F. W. Janssen	28	1	115,147	14	3.6	12.1
Interstate Milk Co. Own		15	9	122,955	11	3.61	12.1
Henrich, E.	Clinton Milk Co.	6	4	147,333	1	3.37	11.7
Woodruff, L.	Geo. Clark	13	6	183,976	7	3.40	11.87
Nixson, L. O.	C. W. Vanalst	1	1	300,000	1	3.40	12.35
Clinton Milk Co.	Lebanon, N. J.	20	1	326,850	15	3.19	11.99
Shenback, S.	P. Adair Milk Co.	2	2	680,000	4	3.34	11.77
Clinton Milk Co.	Clinton, N. J.	3	3	970,000	2	3.35	11.83

\* Average count of 3% fat and 11.50 total solids is required by this department.

cream and ice-cream; paregoric coffee, sugar, flavoring syrups, tincture of iodine, salt, lemonade, candy, etc. There were also several samples of liquor for alcoholic content.

A rather interesting case was a sample of cider which had apparently caused pronounced illness in those who drank it. The cider had an astringent taste. Analysis showed it to contain a very appreciable amount of zinc which it was afterward found had been derived from a galvanized iron pail in which some of the frozen cider had been heated, to thaw it.

#### CITY WATER

For purposes of comparison with former years and to acquaint inquirers with the chemical character of our city water supply, some of the results are presented in tabular form.

As the composition of the water from the Oak Ridge and Canton reservoirs is quite different, tables of monthly analyses of water from both of these sources and also the laboratory fauet are given as the most representative of our city water. Similar tables of analyses of water taken at other principle points in the system are available if needed.

#### NEW CHEMICAL LABORATORY

The need and desirability of a municipal chemical laboratory for this Department, spoken of in last year's report, is now more pressing. If we are to maintain a service comparable with other cities such a laboratory will be absolutely necessary.

Commission, cold storage, slaughter houses and Centre  
Market inspected daily

Cattle inspected and stamped at abattoirs	5 941
Calves inspected and stamped at abattoirs	21 690
Sheep inspected and stamped at abattoirs	67,090
Hogs inspected and stamped at abattoirs	338
Cattle (country dressed) inspected and stamped	0
Calves (country dressed) inspected and stamped	19 780
Sheep (country dressed) inspected and stamped	1,321
Hogs (country dressed) inspected and stamped	1,623
Goats (country dressed) inspected and stamped	390
Cattle re-inspected	83 532
Calves re-inspected	85 336
Sheep re-inspected	145,191
Hogs re-inspected	135 927
Pounds of bologna inspected and stamped	47 155
Pounds of pork inspected	8,038 001
Pounds of poultry inspected	10,12,905
Pounds of fish inspected	2,063,500
Pounds of beef inspected	22,000
Pounds of liver inspected	2,900
Legs of lamb inspected	7,180
Rounds of beef inspected	103
Beef carcasses condemned	34
Calf carcasses condemned	144
Sheep carcasses condemned	124
Hog carcasses condemned	4
Bird carcasses inspected and re-inspected	8,129
Complaints investigated	40

#### CONDEMNED

Beef	5,095 pounds
Beef (corned)	1,126 "
Veal	954 "
Lamb	1,654 "
Pork	2,211 "
Bacon	355 "
Bologna Sausage	1,760 "
Livers	701 "
Tripe	50 "
Turkeys	450 "
Chickens	2,600 "
Ducks	54 "
Geese	275 "
Rabbits	125 pair
Miscellaneous meats	3,213 pounds

## DEPARTMENT OF HEALTH

# ANALYSIS OF NEWARK AQUEDUCT WATER

Samples from Clinton Stream before Junction with Oak Ridge Stream at Newfoundland  
Plants per Million

Year	Month	Day	NITROGEN										Temp- erature Fahrenheit	Total Solids	Loss on Evaporation	Fixed Matter Mg. per L.
			Free Ammonia	Ab- solute Ammonia	Nitric Acid	Nitrate	Chlorine	Phosphorus	Iron	Copper	Lead	Calcium				
1922	January	32	0.018	0.064	0.00	0.03	3.0	10.0	3.0	8	26					
	February	32	0.010	0.060	0.03	0.03	4.3	11.0	3.0	10	26					
	March	40	0.008	0.044	0.00	0.09	2.5	18	4.0	11	29					
	April	48	0.011	0.064	0.00	0.03	3.5	10	4.0	46	33					
	May	52	0.002	0.066	0.00	0.04	1.8	8	3.5	11	24					
	June	70	0.009	0.055	0.00	0.05	2.3	7.5	4.0	17	23					
	July	75	0.002	0.042	0.00	0.05	2.0	11	3.8	16	22					
	August	65	0.004	0.036	0.00	0.06	2.5	15	3.6	17	29					
	September	60	0.002	0.070	0.00	0.08	9.5	15	4.7	21	26					
	October	66	0.004	0.062	0.00	0.06	2.3	14	4.8	12						
	November	49	0.006	0.060	0.00	0.05	2.0	8	4.2	13						
	December	44	0.005	0.078	0.00	0.05	2.5	8	3.7	20						

	Average Per Cent	
	Total Solids	Fat
Total samples above standard.....	12.17	3.54
Total samples below standard.....	11.14	3.00
Total samples above and below standard.....	12.11	3.51

Making comparisons it is found from the above that not only is the general average quality of the milk officially lower than last year but that the percentage of samples below the standard is much higher than for the last four years. No particular reason for this is apparent but should the condition continue the cause should be ascertained and remedied, if possible.

A number of samples of cream were examined and all found to be above the standard and to contain no foreign fat.

#### ICE CREAM

A State Act became effective February 20, 1922, requiring ice cream to contain at least 8% of butter fat and prohibiting the use of other fats or oils.

One hundred and fifty-nine samples of ice cream were analyzed for the amount and genuineness of the fat content. All of these contained genuine butter fat and only six contained less than 8%.

#### SACCHARIN

This substance is still extensively used in whole or in part as a sweetening agent in cheap soda waters. Many of the samples in which it was found come from without the city and State.

Of the forty-three samples examined, saccharin was present in twenty-six.

#### MISCELLANEOUS

There was the usual variety of odd samples submitted for examination. Among them were special samples of milk.

## DEPARTMENT OF HEALTH

# ANALYSIS OF NEWARK AQUEDUCT WATER

Averages of Monthly Examinations  
Parts per Million

1922	Temperature, Degrees Fahr	Turbidity	Color	NITROGEN AS			Chlorine, Parts per Million	Total Solids	Loss on Ignition	Fixed Matter, Parts per Million
				Free Ammonia	Nitrite	Nitrate				
Oak Ridge Stream	49	.8	21	.009	.074	.23	2.6	60	.71	39
Clinton Stream	50	.5	17	.006	.088	.05	2.6	41	.4	27
Kanouse Brook	45	.6	35	.01	.071	.06	2.9	50	.20	30
Weso Lakes Stream	50	.5	40	.01	.095	.07	2.7	55	.71	44
Macopin Intake	50	.6	28	.068	.079	.37	2.7	54	.21	33
Cedar Cr. Intake	52	.7	27	.066	.065	.07	2.6	54	.24	33
Cedar Cr. Outlet	52	.5	24	.069	.071	.07	2.8	52	.26	37
Belleville Reservoir	53	.6	22	.066	.065	.07	2.7	50	.40	40
Laboratory Test	56	.6	22	.065	.061	.07	2.9	50	.49	42

ANALYSIS OF NEWARK AQUEDUCT WATER  
 Samples from Oak Ridge Stream before Junction with Clinton Stream at Newfound and  
 Parts per Million

Year	Temp- ature Degrees Fahr	Total Solidity	Conc	NITROGEN AS				Chlorine	Total Solids	Loss in Ignition	Fixed Matter Matter
				Free Ammonia	Albuminoid Ammonia	Nitric Acid	Nitric Acid				
January	32	2	18	0.014	0.028	0.00	0.00	0.5	68	75	40
February	32		18	0.012	0.026	0.00	0.00	0.4	55	25	41
March	40	0.5	15	0.008	0.004	0.00	0.00	0.04	48	16	30
April	49	.8	20	0.008	0.004	0.00	0.00	0.08	57	10	40
May	63	1.5	19	0.005	0.005	0.00	0.00	0.08	54	27	30
June	72	0.5	33	0.002	0.002	0.00	0.00	0.08	58	25	58
July	65	0.5	18	0.003	0.003	0.006	0.006	0.06	62	12	45
August	54	1.5	30	0.004	0.003	0.00	0.00	0.06	57	14	45
September	74	1.5	37	0.029	0.10	0.0	0.0	0.08	64	30	34
October	68	0.5	25	0.012	0.136	0.0	0.0	0.03	62	24	38
November	40	0.5	12	0.006	0.055	0.0	0.0	0.08	63	15	50
December	33	0.5	10	0.006	0.038	0.0	0.0	0.08	59	18	41



ANNUAL REPORT  
OF THE  
**Division of Bacteriology**

*Charles V. Craster, M. D., Health Officer.*

DEAR SIR: Herewith is submitted the report of the Division of Bacteriology for the year ending December 31, 1922

Respectfully,

R. N. CONNOLLY, M. D.,  
*Bacteriologist.*

**DIPHTHERIA**

This disease presented some very unusual features during 1922. There were fewer cases of the disease reported, yet the number of deaths was greater than for several years past. This is a serious condition and much to be regretted, especially when we consider that we have better facilities for early diagnosis of diphtheria than for any of the contagious diseases and that the city provides a practically unlimited supply of diphtheria antitoxin free of charge for all of its residents.

It may be said at this point that the potency of the antitoxin produced at the Health Department Laboratory during 1922 averaged higher than in any previous year.

Several factors appear to be responsible for the unfortunate results; the principal one is that parents or guardians neglect to seek medical advice for their children until the disease has progressed beyond the point from which recovery can be expected. This is strikingly shown by the fact that our

ANALYSIS OF NEWARK AQUEDUCT WATER  
 Samples from Laboratory Faucet, 927 Broad Street  
 Parts per Million

Temp. Expt. in deg. C.	Ther- mo- meter	NITROGEN AS				Info- r- mation	Loss by Evap.	Loss by Ignition	Fusible Matter
		Free Ammonia	Alkaloidal Ammonia	Nitric	Nitrous				
38	0.8	0.008	0.008	0.00	0.05	1.0	50	20	30
47	0.5	0.006	0.006	0.00	0.05	4.0	46	17	29
42	0.5	0.006	0.006	0.00	0.05	3.5	36	13	31
53	0.0	0.006	0.006	0.00	0.05	4.0	5	26	28
58	0.5	0.003	0.003	0.00	0.07	2.5	47	15	32
60	0.5	0.001	0.002	0.00	0.08	2.8	46	15	31
71	0	0.003	0.005	0.00	0.05	3.0	50	15	35
71	0	0.003	0.004	0.00	0.07	3.5	52	24	36
81	0.5	0.004	0.007	0.00	0.08	3.5	53	25	29
67	0.5	0.006	0.008	0.00	0.08	3.0	60	15	45
55	0.5	0.006	0.007	0.00	0.06	2.5	60	33	47
47	0	0.006	0.008	0.00	0.05	3.5	55	16	49

The following table shows the results of antitoxin treatment of diphtheria in Newark during 1922 as compared with the previous two years:

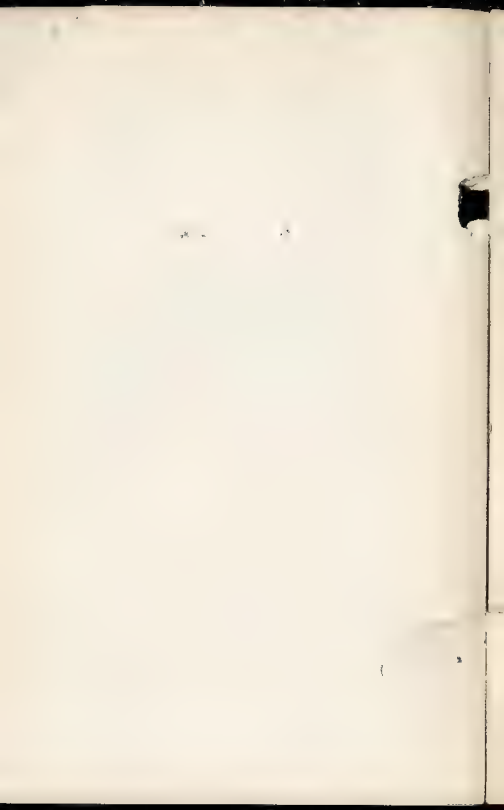
	1922	1921	1920
Total number of cases of diphtheria	771	1,059	1,022
Total mortality, respective of treatment	73—9.4%	44 4.1%	62 6.0%
Number of cases treated with antitoxin	724	991	956
Number of deaths (treated with antitoxin)	64 8.85%	36 3.6%	47 4.9%
Number of cases not treated with antitoxin	47	68	66
Number of deaths (not treated with antitoxin)	9 19.14%	8 11.7%	15 22.7%

## TUBERCULOSIS

The number of samples of sputum from suspected cases of tuberculosis received during 1922 was 2,762 and the number of samples showing tubercle bacilli was 424. This is a marked decrease in positive cases as compared with the previous years and bears out the observations reported by other communities that there is an apparent and probably real decrease in the incidence of this disease.

## TYPHOID FEVER

During 1922 there were examined at the Laboratory 6,662 samples of blood for the Widal reaction. Many of these were from food handlers and consequently were not even suspects, as they were taken only as a routine measure. There were however, among the samples of blood received from suspects 147 samples which gave a positive reaction. Some of these were duplicates from cases previously examined and others were from persons who had been vaccinated against typhoid. After allowing for these cases there yet remain enough positive cases to indicate a marked increase in typhoid as compared with recent previous years.



ANNUAL REPORT  
OF THE  
**Serological Laboratory**

records contain the histories of 22 children whose death occurred within twenty-four hours after the first administration of antitoxin.

Another factor in the high death rate was the prevalence of measles with the attendant bronchopneumonia, especially in the earlier months of the year. Many of these may also have been infected with diphtheria. About 30% of the deaths attributed to diphtheria failed to show Loeffler bacilli in cultures made from the victims' throats. Such cases unfortunately are charged to diphtheria and militate against the accuracy of statistics where there will always be reasonable ground for the suspicion that a mistake in diagnosis was possible. The cases are, however, recorded as diphtheria and must be accepted in our statistics. It is to be hoped that the Schick test and the toxin-antitoxin immunization will help to minimize such results.

The following table presents the diphtheria records of Newark for 1922 and contrasts the results of treating the disease with and without antitoxin.

#### DIPHTHERIA RECORD FOR 1922

Number of cases reported	771
Number of cases treated with antitoxin	724
Number of deaths treated with antitoxin	64
Case mortality	8.85%
Number of cases not treated with antitoxin	47
Number of deaths not treated with antitoxin	9
Case mortality	19.14%
Number of cases treated with Newark antitoxin	544
Number of deaths treated with Newark antitoxin	33
Case mortality	6.06%
Number of cases treated at Soho with antitoxin	180
Number of deaths treated at Soho with antitoxin	31
Case mortality	17.22%

ANNUAL REPORT  
OF THE  
**Serological Laboratory**

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*Charles V. Craster, M. D., P. H., Health Officer.*

DEAR SIR: Herewith is submitted the report of the work performed in the Serological Laboratory for the year 1922

Respectfully,

H. S. MARTLAND, M. D.,  
*Pathologist.*

The work during the year 1922 has greatly increased, the total number of examinations far exceeding that of any previous year.

During the year 11186 Wassermann tests were made for the detection of syphilis. It is interesting to note that the test has been used by physicians mainly as a diagnostic exclusion test in general surgery and medicine more than for the diagnosis of frank active syphilis. This I believe is due to the following reasons:

(1)—Active syphilis in the first two years is easily recognized by the clinicians handling this class of cases without the aid of the blood test.

(2)—In the first year of syphilis the blood test is of little use (after the diagnosis is made), as a certain amount of treatment is needed no matter what the test shows.

(3)—The reporting of venereal diseases as required by the State Department of Health tends to lead many physicians

<i>Milk Supply—</i>		
Milk examinations general city supply	3,251	3,154
Milk examinations, City Hospital supply	398	0
<i>Water Supply—</i>		
Water examinations, Pequannock Supply	359	283
Water examinations, wells and cisterns	26	21
<i>Veneral Diseases—</i>		
Specific catarrhal examinations	2,189	2,187
Specific catarrhal examinations positive	360	299
Rabies—		
Brain tissue of animals examined	63	27
Number of positive cases found in animals	*28	7
Preventive treatment to exposed persons	13	0
<i>Vaccines, Etc.—</i>		
Typhoid vaccine doses distributed	629	268
Pertussis vaccine, doses distributed	964	800
Tuberculin for treatment, doses distributed	400	800
<i>Water from Swimming Pools and Tanks—</i>		
Swimming Pools	145	99
Samples of ice examined	13	0
*Twenty two positive cases were from out of town		



## DEPARTMENT OF HEALTH

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## How Wassermann Test was used

As diagnostic and therapeutic aid in the first two years of syphilis	283
As diagnostic and therapeutic aid in old and latent syphilis	644
As diagnostic aid in general surgery and internal medicine	10,259

Total 11,186

## Examination of Venereal Sores

79

Dark field examinations (including stained smears and aspiration of regional glands)	21
Positive	

## Examination for Gonococcus:

2,192

Smears for Gonococci (City Hospital only)	276
Positive	

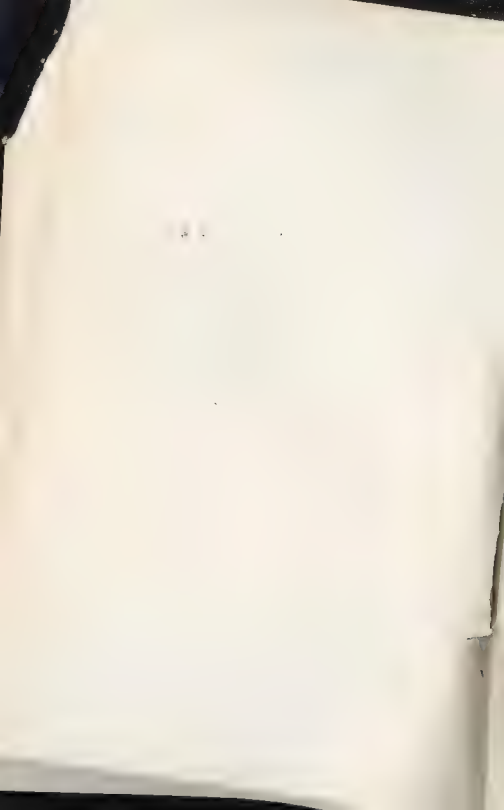
## Examination of Spinal Fluid.

760

Routine serological examination (Including cell counts, colloidal gold and Wassermann tests)	
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Grand Total

14 217



## CULTURE COLLECTORS

Following is a summary of the work performed by the two culture collectors attached to the Bacteriological Laboratory, whose duty is to supply the culture stations with antitoxin and outfits for taking diphtheria cultures, sputa, Wassermanns, typhoid and other blood tests, collect daily all such outfits used and left at the stations by the doctors and delivered to the laboratory, with figures for past five years:

	1922	1921	1920	1919	1918
Antitoxin delivered ..	2,997	3,035	3,163	3,815	2,600
Outfits Delivered—					
Cultures .....	11,641	14,014	12,309	13,997	9,599
Sputa .....	4,213	4,806	4,271	3,980	3,771
*Typhoid ..	1,194	1,324	1,133	1,185	925
Wassermanns ..	6,661	5,938	5,341	5,374	3,494
Catarrhal .....	3,364	3,308	2,933	3,366	1,179
Outfits Collected.					
Cultures .....	12,611	15,415	8,835	11,554	4,063
Sputa .....	2,745	3,099	2,880	2,548	2,391
*Typhoid ..	5,404	4,901	687	397	419
Wassermanns ..	5,253	4,830	3,935	3,261	2,107
Catarrhal .....	2,021	2,065	1,986	2,331	867

\* Note Typhoid collections much greater than delivery inasmuch as City Dispensary secured their own sets for Food Handler examinations and culture collectors delivered them to the laboratory

to get along without such aids as may expose the patient's identity to even semi-public records. Many patients will go to "quacks" or outside of the State for treatment rather than submit to a report of their disease to any authorities other than their own physician.

Wassermann tests are made on every Monday, Tuesday, Wednesday, Thursday and Friday. Blood tests received in the laboratory before 12 o'clock noon are reported on the following day. (Rude alcoholic antigen with four hour ice box fixation has been the method used during the year. The work of the laboratory has been too great to allow any experimentation on the various precipitation reactions for the diagnosis of syphilis. The recent installation of a self freezing ice-chest has added to the efficiency of the work and is a considerable saving in animal's necessitating only two bleedings a week instead of five.

As regards the proper diagnosis of venereal sores, it is still to be regretted dark-field examinations for *Treponema Pallida* are not used as frequently as they should to determine the presence or absence of syphilis.

#### NUMERICAL SUMMARY OF LABORATORY WORK DONE IN THE SEROLOGICAL LABORATORY AT THE CITY HOSPITAL IN 1922

Wassermann Tests:		Separate	Total
		Items	Only
Blood Wassermans			
Positive	903	10,411	
Spinal fluid Wassermans			
Positive	56	775	
Total			11,186
Source of Wassermann Tests:			
Physicians and hospitals of Newark	6,227		
City Hospital	3,436		
City Dispensary	1,523		
Total			11,186

# ANTITOXAN AND CULTURE STATIONS BY WARDS. *Continued*

Ward	STATION	Address	Telephone No.
Eighth	H. J. Quinn	187 Bacomfield Avenue	1652 Humboldt
Ninth	Resnick's Pharmacy	449 Sumner Avenue	4065 B. B.
Tenth	Arnold, A.	684 Mt. Prospect Avenue	4134 B. B.
Eleventh	8th Precinct Police Station	Washington Avenue	5400 Market
Twelfth	A. Maria	345 Bloomfield Avenue	2942 B. B.
Thirteenth	Lymanett & Bro.	77 Lincoln Park	3034 Mitchell
Fourteenth	Lincoln Drug Co.	123 Broad Street	1341 Waverly
Fifteenth	R. M. Land	211 Clinton Avenue	1337 Waverly
Sixteenth	B. M. Gersten	4016 Bergen Street	0571 Bigelow
Seventeenth	East Side Pharmacy	Adam and Warwick Streets	8125 Market
Eighteenth	J. B. Foster	Orange and Rosville Avenues	0151 B. B.
Nineteenth	9th Precinct Police Station	Orange and Sixth Streets	5400 Market
Twentieth	O. Scholz	131 Wilson Avenue	0479 Market
Twenty-first	H. West	28 Fleming Avenue	6267 Market
Twenty-second	3rd Precinct Police Station	Fleming Avenue and J. Read Street	5900 Market
Twenty-third	A. Marquet	1041 South Orange Avenue	2878 M. Liberty
Twenty-fourth	J. Schack	191 Avon Avenue	5096 Waverly
Twenty-fifth	A. Reusch	661 Springfield Avenue	2444 Waverly
Twenty-sixth	F. L. Fendt	South Orange Avenue	5400 Market
Twenty-seventh	A. Koebler	76 Belmont Avenue	2494 Waverly
Twenty-eighth	4th Precinct Police Station	362 Springfield Avenue	2593 Bigelow
Twenty-ninth	Wiensch	Seventeenth Avenue	5400 Market
Thirtieth	E. Brock	Springfield Avenue and Tenth Street	2484 Waverly
Thirty-first	L. Haggy	Central Avenue	3301 Market
Thirty-second	J. J. Jorg	531 Clinton Avenue	4189 B. B.
Thirty-third	W. J. Witt	821 Clinton Avenue	2468 Waverly
Thirty-fourth	5th Precinct Police Station	Hunterdon and Bigelow Streets	2871 Waverly
Thirty-fifth			5400 Market

The following table will show the various tests made in the diagnosis of syphilis and the results, by months

Month	Wassermann	Positive	Wassermann	Positive	Total	Dark Field	Positive
January	898	94	61	2	950	9	2
February	864	123	48	3	912	5	1
March	1051	102	65	2	1176	2	1
April	841	46	82	2	973	5	1
May	949	62	64	6	1024	6	4
June	932	77	47	3	971	11	3
July	741	41	33	1	794	11	2
August	784	23	54	6	838	8	1
September	714	63	50	7	794	6	3
October	936	79	122	8	1058	7	1
November	899	93	74	5	973	5	1
December	772	71	60	4	832	4	2
Total	10,411	903	775	56	11,186	79	21

ANNUAL REPORT

OF THE

**City Dispensary**

## ANTITOXIN AND CULTURE STATIONS BY WARDS

Ward	STATION	Address	Telephone No
First	A D Bianchi	Seventh Avenue and Sheffield Street	1420 D. B
First	N Spallone	72 Park Avenue	1858 B. B
First	Albert Wester	95 Belleville Avenue	1142 B. B
First	2nd Precinct Police Station	Summer Avenue and Seventh Avenue	5400 Market
Second	C. Kuecht	Clay and Broad Streets	2139 Humboldt
Second	St Michael's Hospital	Central Avenue and Higgins Street	7160 Mahee
Second	City Dispensary	Plane and William Streets	3376 Mitchell
Second	C. H. Zhaarr	783 Broad Street	1333 Market
Second	Kaplan Pharmacy	449 Broad Street	2741 B. B
Second	Perty's City Hall Pharmacy	Broad Street	0914 Mulberry
Second	1st Precinct Police Station	Coast and Washington Streets	5400 Market
Third	St Barnabas' Hospital	681 High Street	6610 Market
Third	Bel Israel Hospital	High and Kinney Streets	1326 Mitchell
Third	L. McEwen	58 Springfield Avenue	4633 Market
Fourth	Firmen's Pharmacy	Broad and Market Streets	5116 Market
Fourth	Max Lewitt's	Broad and Fulton Streets	7190 Market
Fourth	Veteran's Clinic	Franklin Street	2831 Market
Fourth	L. M. Greenfield	201 Walnut Street	3608 Market
Fifth	Reckert Pharmacy	167 Ferry Street	0202 Market
Fifth	Sedlor Drug Co	71 Ferry Street	1764 Market
Sixth	L. P. Smith	315 South Orange Avenue	1514 Mulberry
Sixth	L. I. Staebbe	159 South Orange Avenue	1539 Market
Sixth	City Hospital	116 Fairmount Avenue	3300 Market
Seventh	P. J. Corrigan	25 Wallax Place	3205 Market
Seventh	A. C. Banks	79 Bank Street	3141 Mulberry
Eighth	Howard Pharmacy	190 Washington Avenue	1991 B. B
Eighth	Central Pharmacy	289 Belleville Avenue	0453 B. B



## DISTRICT PHYSICIANS' LINES

*First District* East Kinney Street from Jefferson Street to Belmont Avenue to Eighteenth Avenue, to City Line, around to imaginary line of Jefferson Street, to East Kinney Street. District Physician—Dr. Abraham Rothschild, 65 Avon Avenue. Telephone Waverly 1064.

*Second District* Sussex Avenue to North Fifth Street to Orange Street, to City Line to South Orange Village Line to Irvington Line, to Twentieth Street, to Eighteenth Avenue, to Belmont Avenue, to Jones Street, to Norfolk Street, to Sussex Avenue. District Physician—Dr. Thomas J. Kelly, 53 Roseville Avenue. Telephone Branch Brook 4866.

*Third District*—Fulton Street from Passaic River to Broad Street, to East Kinney Street, to Jefferson Street, to Passaic River. District Physician—Dr. Watson F. L. Rolemann, 64 Prospect Street. Telephone Market 9161.

*Fourth District* Jefferson Street from Passaic River, East Kinney Street to Broad Street, to City Line, south to Newark Bay, to Passaic River, to Jefferson Street. District Physician—Dr. Wm. T. Ramage, 232 Lafayette Street. Telephone Market 0471.

*Fifth District* Central Avenue to Sussex Avenue, to Norfolk Street, to South Orange Avenue, to Jones Street, to West Kinney Street, to Broad Street, to Central Avenue. District Physician—Dr. Michael J. Coffey, 24 Breintnall Place. Telephone Market 8460.

*Sixth District*—Fulton Street from Passaic River to Central Avenue, to Sussex Avenue, to North Fifth Street, to Orange Street, to East Orange City Line to Belleville City Line, to Passaic River, to Fulton Street. District Physician—Dr. M. Jedel, 125 Fourth Street. Telephone Branch Brook 3216.



## CITY DISPENSARY MEDICAL STAFF

FREDERICK HORSFORD, M. D., *Chief of Clinic*

IOS E. SCHRAMM, M. D.	VINCENT NAPOLIELLO, M. D.
C S. ANIVER, M. D.	HAROLD M. BRAY, M. D.
JAMES V. DI JASO, M. D.	

## PEDIATRIC DEPARTMENT

JULIUS LEVY, M. D., *Chief of Clinic*

*Assistants*

PAUL H. HOSP, M. D.	SIDNEY B. RAWITZ, M. D.
ARTHUR ELLIS, M. D.	HENRY B. SILVER, M. D.
L. UHAS ROSENBERG, M. D.	

## DEPARTMENT OF SURGERY

DAVID A. KRAKER, M. D., *Chief of Clinic*

HARRY J. GILBERT, M. D.	M. G. DUBOIS, M. D.
I. D. HASKELL, M. D.	

## GENITO URINARY AND CYSTOSCOPIC DEPARTMENT

C. R. O'CROWLEY, M. D., *Director*  
H. C. POVEY, M. D., *Chief of Clinic*

*Assistants*

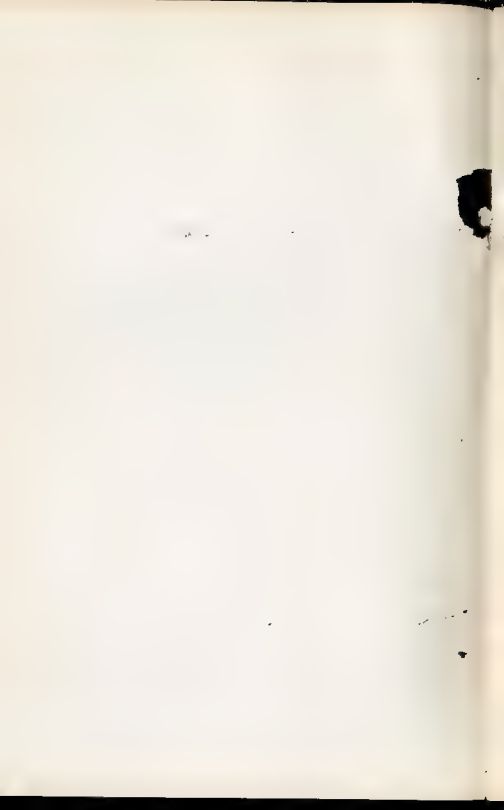
S. C. KELLER, M. D.	WILLIAM NASH, M. D.
S. ROTHENBERG, M. D.	PAUL MENK, M. D.
MORTON M. BROTMAN, M. D.	NICHOLAS RAMUS, M. D.
N. V. DEL DEO, M. D.	

## DEPARTMENT OF GYNECOLOGY

WILLIAM GAUCE, M. D., *Chief of Clinic*

*Assistants*

A. J. GORDON, M. D.	SELMA WEISS, M. D.
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DEPARTMENT OF HEALTH

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PRENATAL DEPARTMENT

A. J. GORDON, M. D.

LEWIS S. HARRISON, M. D.

DEPARTMENT OF METABOLISM

LEO TRIMER, M. D., *Chief of Clinic*

*Assistants*

SELMA WEXSS, M. D.

HENRY C. McBRIDE, M. D.

DEPARTMENT OF TUBERCULOSIS

M. J. FINE, M. D., *Chief of Clinic*

*Assistants*

IRVING WILLNER, M. D.

WILLIAM GREEN, M. D.

JULIUS SOBIN, M. D.

LOUISE DAVIS, M. D.



# ANNUAL REPORT

## OF THE

### City Dispensary

February 1, 1923

To Dr. Charles V. Craster, D. P. H., Health Officer.

DEAR SIR. I herewith submit the annual report of the Dispensary activities for 1922.

Respectfully,

HENRY A. OLTMAN,  
*Apothecary.*

Individual cases treated at Dispensary .....	12,903
Total number of visits made by patients. ....	61,203
Clinic prescriptions filled. ....	66,216
Patients sent to City Hospital and other hospitals maintaining city beds .....	1,653

From the standpoint of clinic attendance the year 1922 represents the greatest activity in the history of the Dispensary, there being 61,203 attendances recorded as against 60,593 for 1921. The increase is largely due to the addition and operation of three new clinics: cardiac, mental and metabolic, which were organized the latter part of 1921. The largest increase was in the orthopedic clinic which received a strong and popular impetus through the ministrations of the eminent surgeon, Dr. Adolph Lorenz. The orthopedic clinic was not only sought by local patients but many came from various parts of the country. The capacity of the clinic staff was overtaxed and made necessary the addition of two more masseuses.

## DEPARTMENT OF PUBLIC AFFAIRS

## DEPARTMENT OF SKIN INCLUDING SYPHILIS

Division A

Division B

H J F WALL HAUSSER, M. D., *Chief of Clinic*JULIUS A KOCH, M. D., *Chief of Clinic**Assistants*

NATHAN B. HELIER, M. D.

G S. BANGERT, M. D.

FRITZ KALFMAN, M. D.

N V DEB DEO, M. D.

MAYN E. BROADNAX, M. D.

ROBERT R. SELLERS, M. D.

FRANK J. MCCARTHY, M. D.

J. W. GRIFFIN, M. D.

## DEPARTMENT OF RECTAL DISEASES

DAVID M. KRAKER, M. D., *Chief of Clinic**Assistant*

CARL WINTSCH, M. D.

## DEPARTMENT OF EYE, EAR, NOSE, THROAT

F. A. CURTISS, M. D., *Chief of Clinic**Assistants*

C. A. MEYER, M. D.

LOUIS MARTICCI, M. D.

## DEPARTMENT OF NERVOUS DISEASES

CHRISTOPHER BEILING, M. D., *Chief of Clinic**Assistants*

CHARLES ROSEWATER, M. D.

WALTER E. MERRILL, M. D.

JULIUS SOGIN, M. D.

CHARLES F. JOHNSON, M. D.

## DENTAL DEPARTMENT

J. J. McMANUS, D. D. S.

J. E. H. GUTHRIE, D. D. S.

J. M. PIRSHMAN, D. D. S.

## DEPARTMENT OF ORTHOPEDIC SURGERY

ARTHUR LORENZ, M. D.

CARL R. KEEPLER, M. D.

*Assistants*

FRANK W. PIANCO, M. D.

J. H. BRIDGERS, M. D.

M. S. AVIDAN, M. D.

L. CHAS. ROSENBERG, M. D.



Sun. Lamp for treatment of dermatological, orthopedic and surgical conditions

The medical staff deserves the sincere appreciation of the City of Newark for the work done and the support they have given to the dispensary clinics

The appended table gives a detailed view of the year's accomplishments of the Dispensary as well as of the work of the six district physicians who constitute the visiting staff for the indigent sick.

## CLINICS

- MEDICAL—Daily 9 A. M.  
 DISEASES OF CHILDREN—Daily, 10 A. M.  
 SURGICAL—Daily, 9 A. M.  
 GENITO-URINARY—Monday and Thursday, 10 A. M.  
 DISEASES OF WOMEN—Tuesday, 3 P. M.  
 CYSTOSCOPIC—Wednesday, 10 A. M.  
 DISEASES OF SKIN—Tuesday and Friday 9 A. M.  
 DISEASES OF RECTUM—Tuesday and Friday, 10 A. M.  
 SYPHILIS—Male; Wednesday 3 P. M.  
 SYPHILIS—Female—Friday, 9 A. M.  
 EYE, EAR, NOSE AND THROAT—Monday and Friday, 3 P. M.  
 NEUROLOGICAL—Friday, 2 P. M.  
 ORTHOPEDIC—Tuesday, Thursday, Saturday, 9 A. M.  
 DENTAL—Daily, except Saturday 1 P. M.  
 PRENATAL—Thursday 3 P. M.  
 NERVOUS PSYCHIATRIC—  
 Tuesday 10 A. M.—2 P. M.; Thursday, 3 P. M.  
 CARDIAC—Wednesday 3 P. M.  
 METABOLIC—Thursday 3 P. M.  
 TUBERCULOSIS—  
 Daily—Adults and children, 3 P. M. except Saturday  
 Night Clinic, Wednesday, 6 P. M.  
 Colored—Adults—Tuesday and Friday, 10 A. M.  
 Children—Saturday, 10 A. M.  
 Adults and Children—Wednesday, 3 P. M.  
 ADMISSION TO SANATORIA—Verona, Monday and Thursday,  
 10 A. M.; Scho, Monday and Tuesday, 10 A. M.; Glen Gardner  
 Wednesday 10 A. M.

## DEPARTMENT OF HEALTH

189

## RECAPITULATION

	1922	1921
Total number of patients treated	61,203	56,902
Total number of prescriptions dispensed	66,216	60,553
Total number of patients sent to hospitals	1,655	1,653
Total number vaccinations	884	1,113
Total number new cases in clinics	12,963	11,927

## NEW CASES IN CLINICS FOR THE YEAR 1922

Prenatal	126	Medical	1,798
Neurological	209	Children	1,285
Eye, Ear, Nose, Throat	1,027	Skin	1,091
Orthopedic	838	Neuro-psychiatric	151
Tuberculosis	2,258	Gynecological	461
Syphilis	553	Rectal	147
Dental	990	Metabolic	44
Surgical	1,349	Cardiac	13
		Genito-Urinary	633

The attendance record for the other clinics does not show any material increase, excepting the venereal and tubercular clinics, due no doubt to the easement of the unemployment situation, allowing many to avail themselves of private treatment. The Syphilis clinic shows 553 individual cases and 10,778 visits made in the clinic as compared with 668 individual cases and 9,750 visits for the previous year. In connection with these clinics the report on the administration of treatments and tests will be made by the Director of the Bureau of Venereal Diseases.

Notable during the year's work is the growth of the laboratory, as an aid in diagnosis or confirmation tests of clinical findings. The laboratory has become an indispensable adjunct for all the clinics.

Because of the difficulty to secure adequate volunteer clinicians it became necessary to appoint a clinical physician at a small recompense for services and this course was eventually have to be adopted with regard to surgical services.

The discontinuance of the Bureau of Mental Hygiene made necessary the establishment of a clinic to handle these mental cases at the dispensary in conjunction with the Overbrook Parole Clinic, in charge of a physician from that institution. There were 562 visits made to this clinic as against 126 for 1921.

The Dental Department maintains the services of two dental surgeons and one or more volunteer assistants for five days in the week.

In concluding this report I do not think it amiss to call attention here to certain needs of the clinics that due to the limited means available are preventing the full development of the Dispensary. I refer to the lack of equipment. The staff have repeatedly asked for a Krimayer and an Alipane

PATIENTS SENT TO CITY HOSPITAL BY PERMITS ISSUED FROM DISPENSARY FOR CITY  
HOSPITAL AND CITY BEDS MAINTAINED BY OTHER HOSPITALS

HOSPITALS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	
City Hospital	93	10	6	4	7	63	8	72	84	60	50	64	56	84
St. Mark's	10	6	4	5	5	5	3	7	7	8	8	8	8	61
St. James	7	6	5	5	7	7	6	7	7	7	7	7	7	6
St. Barnabas	8		3	3	3	3	4	3	3	3	3	3	3	6
Neary's Maternity	11		5	5	6	6	6	7	7	7	7	7	7	69
St. Leo's	11		5	5	5	5	5	5	5	5	5	5	5	60
Wm. and Elizabeth	4	7	4	3	3	3	3	3	3	3	3	3	3	20
Baker	56		13	8	10	8	10	8	10	13	10	10	10	88
Lyons, La. Infirmary	28	18	20	0	0	0	0	0	0	0	0	0	0	66
Home for the aged & children	7	4		3	0	1	1	0	0	0	0	0	0	13
English Asylum, Day Nursery	0	2	2	0	2	0	1	0	0	0	0	0	0	1
Newman Maternity	4	8	8	3	3	3	3	3	3	3	3	3	3	4
Total	179	66	153	128	78	139	130	137	137	137	137	137	137	1655

## DEPARTMENT OF PUBLIC AFFAIRS

TOTAL ATTENDANCE AT DISPENSARY IN MONTHS AND DISPENSARY TREATED

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Gynaecological	28	18	14	38	26	3	34	64	50	32	0	11	374
Med. cal.	49	45	70	548	516	4	43	164	40	59	59	79	5711
Obstet.	41	41	41	13	562	5	43	164	40	59	59	79	5711
Children	8	7	30	7	44	24	163	24	0	9	18	34	5365
Gynaecological	240	44	276	255	70	5	8	886	8	6	71	8	2718
Male-female	68	64	70	8	88	6	37	79	225	3	1	45	87
Male-female	42	44	1057	95	65	7	42	17	5	10	6	4	690
Male-female	40	95	54	84	17	56	1	15	10	18	1	1	882
Male-female	13	13	410	608	621	82	6	84	88	83	2	27	6550
Male-female	680	95	88	16	64	10	5	14	14	18	1	1	880
Male-female	0	21	30	75	8	85	40	384	42	63	6	2	2031
Male-female	11	3	7	80	7	4	6	4	10	7	1	1	86
Male-female	5	15	7	15	4	20	2	6	4	4	3	1	81
Male-female	1	0	1	46	81	5	14	108	4	10	1	1	180
Total Treated	5671	541	602	514	3641	904	5599	1615	4410	475	472	438	6103
Male-female	6907	530	168	5766	512	584	4837	571	1003	5642	51	486	66216

PATIENTS SENT TO CITY HOSPITAL BY FIRM'S SHED FROM DISPENSARY FOR CITY  
HOSPITAL AND CITY BEDS MAINTAINED BY OTHER HOSPITALS

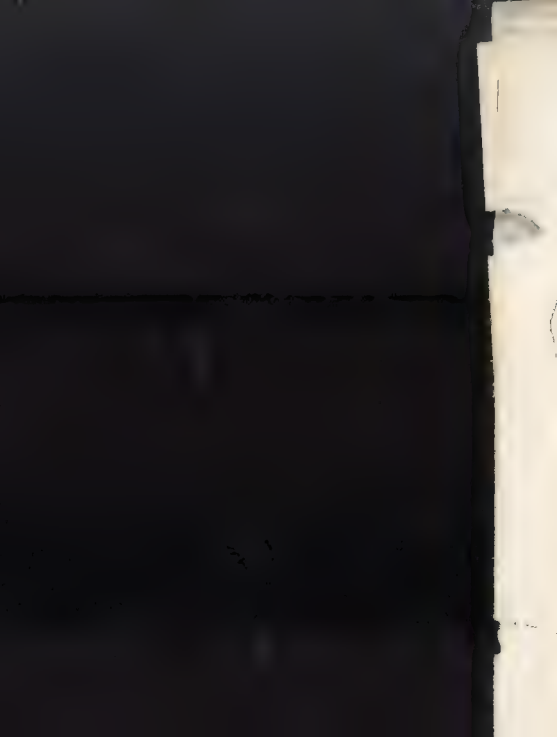
HOSPITALS	Jan	Feb.	Mar	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Total
City Hospital	90	73	77	64	84	77	81	69	52	64	56	38	844
St. Michael's	0	0	4	2	5	3	7	1	2	4	8	9	61
St. James'	0	0	8	1	3	6	7	4	6	4	8	5	63
St. Barnabas	8	14	3	7	4	8	3	5	3	4	2	4	60
Newark Memorial	11	10	5	6	6	0	8	2	4	4	11	8	69
Beth Israel	11	6	5	4	9	7	3	1	4	10	10	10	89
Women and Children	4	2	4	2	6	0	0	2	1	2	2	2	26
Babies'	16	25	13	15	19	11	15	12	18	0	5	17	163
Eye and Ear Infirmary	18	18	29	19	27	29	7	6	16	21	21	22	233
Home for Cripple Children	0	3	2	0	0	1	0	0	3	4	0	1	12
Eighth Avenue Day Nursery	0	2	0	0	1	0	1	0	0	0	0	0	4
Newark Maternity	4	8	3	4	7	1	0	2	3	1	6	2	35
Total	190	160	191	173	176	139	80	100	118	118	111	111	1655





## VISITS BY DISTRICT PHYSICIANS

CASES OF DISEASE	Dist. 1 1913	Dist. 2 1913	Dist. 3 1913	Dist. 4 1913	Dist. 5 1913	Dist. 6 1913	Total
Chickenpox	29	100	51	58	43	11	392
Measles	2	6			2	0	10
Diphtheria	1			8	10		19
Croup	6	38	4	23	17	0	98
Scarlet Fever		8		9	28	2	47
Diarrhoeal Diseases		54	1	8	28	2	93
Whooping Cough	27	1	0	14	9	5	56
Tuberculosis	13						13
Croup	30						30
Influenza	2						2
Malaria	35	11		14	45	170	315
Mucocutaneous Eruptions		4		5	5	4	18
Cancer and tumor	3	29	144	6	0	34	216
Rheumatism	3	16	2	41	61	5	128
Miscellaneous Constipation	1	1	3	10	6		21
Apothecary		11		0	1		12
Asthma and Premature Birth			1		6		7
Memorials				10	19		29
Convulsions	10						10
Chorea	4	11		3	38	17	73
Miscellaneous Nervous	13	85	58	134	138	30	558
Stomach and Bowels	1				48		49
Liver Diseases					8		8
Peritonitis	17	4		66	55		142
Mucocutaneous Digestive	1	6	1	28	38		74
Bright's Disease	4	138	76	18	290	6	632
Nephritis	5	1	40		52	13	111
Parasitosis	20	36		52	44	27	179
Miscellaneous Respiratory	2	5	0	51	55	12	125
Organic Heart	2	17		3	44	13	79
Valvular Heart		2	8	44	51	1	76
Miscellaneous Circulatory	1		1	12			14
Mucocutaneous Urinary Disease					7		7
Deformative Children					67		67
Other Children's Diseases	9	16	0	13	13		51
Obstetric		13	3	2			18
Puerperal Diseases		8	1				9
Other Women's Diseases	7	11	10	58	41	1	128
Orbitals and Neovascular							
Fry's eyes	1						1
Epilepsy	3						3
Typhoid Fever				6			6
Tonsillitis	24						24
Ulcers	11						11
Vaccination	4						4
Accidents	3	4	17				24
Diabetes	3		1				4
Hemorrhoids	3						3
Hernia	1						1
Phthisis	2			1			3
Defective eyes				2			2
Miscellaneous	8						8
Totals	330	629	645	1364	1553	526	5047



involves the assistance of the law to enforce the right of ascertaining the presence or absence of suspected infection. Again it is through this channel that the first information of prostitutes and brothels is often furnished to the Police Vice Squad. Eternal vigilance is necessary to keep infected persons under treatment until cured. In this work 3 360 calls by our workers were made during the past year.

Education of the community to the danger of venereal disease tends to raise the general moral tone and militate against disease contraction. Lectures and exhibitions were made before an aggregate audience of 1,942 persons. Assistance and co-operation is furnished to police and civil courts. On the evidence supplied by this department thirty convictions and sentences were imposed by the courts. Solution of domestic problems by the courts and Bureau of Social Service is continually aided. Help is lent to the outside physicians in educating, following and treating private patients.

Liason with the health departments of neighboring cities is maintained. When their infected cases come to our city they are kept under treatment and observation. In the same way infected persons leaving our area are followed by notifying the health department of their abode, giving disease status, etc. The inmates of the jail and penitentiary are regularly inspected to detect the presence of infected persons. So frequently is false information and name given by such inmates that the actual viewing of the inmates by a Venereal Disease Bureau assistant familiar with the many cases is necessary. The names of persons applying for marriage licenses are noted. A short while ago a patient suffering from syphilis was found applying for a marriage license. The individual was induced to postpone the ceremony until sufficient treatment had been administered. A few of the multitude of cases of exceptional interest are here presented so that an estimate of the service can be made. The facts are true and are on record, but the names are fictitious.

## DISTRICT PHYSICIANS' PRESCRIPTIONS DISFENSE IN 1922

	1922												Total
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Prescribed	30	24	19	4	1	13	5	2	5	6	6	12	418
Prescribed	17	13	30	11	1	15	6	11	14	7	7	39	243
Total	47	37	49	15	2	28	11	12	19	13	13	51	661
Prescribed	46	45	37	16	14	19	14	18	15	10	12	18	364
Total	83	82	74	31	28	47	25	36	34	23	25	37	725
Prescribed	38	30	21	7	23	5	13	5	27	17	14	14	266
Total	121	112	95	38	51	52	38	41	61	40	39	51	1,387

Total

Total

operated a butcher's shop. Examination at the Bureau revealed the man suffering from secondary syphilis in a very infectious stage (external ulcers of mouth and throat). He was prevented from handling food until sufficient treatments had been received to render him non dangerous to the community.

Case of M. A. K., who had emigrated to this country from Scotland two years ago. She was seen in Court of Domestic Relations and on basis of evidence supplied by this Bureau was deported because of her condition and immorality, which made her undesirable.

A. B., male, reported for treatment for skin eruption. Diagnosed as syphilis. Stated he contracted it from an indefinite girl named "Darlenella," a habitue of the jitney bus terminals. The description was so incomplete as to make recognition difficult. Such a character was located, however, and proven to have advanced syphilis in the most infectious stage. The girl was sent to the City Hospital. The workers of the bureau learned that she had run away from her family and home and was using an assumed name. Her family in Pennsylvania was notified and she was restored to their care, probably saving her from becoming an absolutely abandoned social derelict and menace.

Workers obtained information about a fifteen-year-old girl infected with gonorrhoea and not under treatment. The girl was located and the presence of disease confirmed. Her history gave evidence of forcible rape. The man accused was arrested by this department and turned over to the police, the evidence being given to the prosecutor. The man is charged with rape and with violating the sanitary code.

Each case of venereal disease is a link in an endless chain. All contacts with the infected person must be investigated.

## BUREAU OF VENEREAL DISEASES

*Dr Charles V. Craster, Health Officer*

DEAR SIR: Following is the annual report of the Bureau of Venereal Diseases

Respectfully submitted,

J. F. WALLHAUSER, M. D.,  
*Director*

E. LEROY WOOD, M. D.,  
*Asst Director*

Important among the various activities of the Newark Department of Health is the work of the Bureau of Venereal Disease Control. Seldom does this division hold the public eye, for several reasons. Although the activities are not less vital, the delicate nature of its task, the abhorrence of the public for venereal disease discussion, and the sordid character of the detail, frequently involved, all contribute to keep its work out of the limelight, notwithstanding the fact that it is the largest clinical branch of the Dispensary.

Then again, with the organization efficient, smooth running and friction absent, the work progresses without the necessity of focussing attention on its labor. A brief resume of the work carried on and some of the results obtained would, however, be undoubtedly profitable and enlightening. First and foremost stands the actual treatment of the disease cases, eradicating them in the individual and so preventing their spread to others. During the past year 19,654 treatments were administered.

Inquiry as to the source of infection is always made, followed up, brought under treatment, and eradicated as a plague spot for others. This last endeavor frequently

## RECORD OF CASES 1914-1922

From 1914 to 1922 the following positive cases of syphilis were known to exist in the City Serological Laboratory.

## Positive Wasserman Tests

1914			
1915	722	1919	559
1916	808	1920	
1917	1,009	1921	1,287
1918	643	1922	1,242
	617		990

Similarly the laboratory tests for the gonococcus gave positive results from 1915 to 1922.

1915-1-16	235	1920	
1917	808	1921	1,274
1918	232	1922	87
1919	410		2,180

REPORT OF CITY SEROLOGICAL LABORATORY  
FOR 1922

Blood Wasserman . . . . .	
Positive Blood Wasserman . . . . .	10,411
Spinal Wasserman . . . . .	903
Positive Spinal Wasserman . . . . .	775
Treponema Pallidum by Dark Field . . . . .	56
Treponema Pallidum Dark Field Positive . . . . .	79
	21

S. F., male, sought treatment from the Venereal clinics for early syphilis. His fiancée, M. H., was found to be the cause. This woman was apprehended, examined, diagnosis of presence of syphilis was confirmed and she was given instruction as to the proper care of herself. A week later, T. W., male, reported to the Bureau, suffering from venereal infection, which he stated he had contracted from his bride of a few days and found to be the fiancée of S. F. Inquiry revealed that he had married this girl in good faith. She was arrested, committed to the City Hospital and arraigned in court on a charge of violating the sanitary code in wilfully exposing others to infection. She was sentenced to Clinton Reformatory and her marriage annulled. The cases of disease were treated and eliminated as a source of danger.

J. M., male, of a movie theatre, suffering from secondary syphilis gave as source of infection, an unknown woman occasionally frequenting Lower Market Street named Mamie A. and living out of town. Repeated unsuccessful efforts were made to apprehend this girl. Four months later, P. R., male, was treated for primary chancre which he contracted from a woman in this theatre. He gave the name of Mamie A. and a West Orange address. The girl was found working in a restaurant and the suspicion of syphilis confirmed. She was arrested and sent to the City Hospital for treatment. She is of distinctly impaired mentality and an effort is being made to secure her admission to a suitable institution. As a hood-lumper and as a promiscuous character she was a distinct menace.

S. C. male, reported that he contracted gonorrhoea from a prostitute named Mabel, February 23, at 2 P. M., at a Broad Street address. Information was conveyed to the police Vice Squad, who closed the place.

In following up its cases of syphilis treated in the City Hospital it was discovered that the husband of one patient





One case that demonstrates the value of this procedure is as follows:

J. M., after being questioned persistently, finally gave the name and address of the woman who was the source of his infection. This young girl, age 17, a candy factory worker, admitted her relations and revealed that she had five regular patrons, giving their names and addresses. Through the persistent pursuit of a comparatively slight lead, six additional persons suffering from active gonorrhoea were brought under treatment. This case shows the menace of the clandestine prostitute and the value of time and effort spent on cases that seem ordinary and unpromising at first.

When it is realized that these are but a few cases selected at random because of their various types, and that they have all occurred within a short period, the scope and importance of the work of this Bureau can be realized. The following charts give the figures on clinic attendance, etc.:

#### EXAMINATION FOR GONOCOCCI

##### City Hospital

Total Smears Taken	3,102
Positive for Gonococci	276

##### City Dispensary

Total Smears Taken	2,134
Positive for Gonococci	863

#### NUMBER OF CASES REPORTED BY PHYSICIANS 1922

	1921	1922
Syphilis	631	708
Gonorrhoea	879	718
Chancroid	38	23

#### NUMBER OF FOOD HANDLERS EXAMINED DURING 1922

Total number examined	6,213
Number of Wassermann Tests taken	42
Positive Wassermann Reactions	10
Number of Smears Taken	33
Positive for Gonococci	11

ANNUAL REPORT OF THE PAROCHIAL  
SCHOOL MEDICAL INSPECTION

The twenty six parochial schools of the City of Newark are under the constant supervision of six Health Department nurses. It has been found that the control of contagious disease and the detection of physical defects are efficiently handled by trained nurses.

## DEFECTS AND CURES

Among the defects found last year were 9,604 cases of defective teeth of which number, cures were obtained in 4,038 instances. This is very encouraging. Treatments include those given at our City Dispensary, The Newark Free Dental Clinic and by private physicians.

The eye and ear defects numbered 1,798 of which 802 were remedied. Many of these cases were eye conditions requiring glasses. In all cases where children could not afford to pay for them glasses were secured free, through school societies or social workers. In this class most of the defects not cured would be ear conditions which are sometimes prolonged through a number of years before cure is possible.

Skin conditions found numbered 1,487 of which 973 were cured. It is probable that a larger proportion of these were eventually cleaned up, as most of the skin conditions were abscesses, boils, etc., eczema and impetigo. The nose and throat defects totaled 2,511, most of which were adenoids and tonsils. Of these, 809 were cured. The proportion of cures to defects was not so high in this class, the reason being that it is not always possible to have the cases treated in the hospitals, as the parents fear to allow their children to spend the necessary night away from home. The condition is also frequently abnormal yet not sufficiently so to make operative cure necessary.



parents secure the necessary treatment for them. Where the family cannot afford to pay for this the cases are referred to our City Dispensary or some other institution giving free treatments.

Six thousand forty class inspections and talks were made during the year. The nurses are instructed to talk to every class regularly upon health subjects, principally personal hygiene. For this purpose demonstrating apparatus is used with good effect, including large sets of teeth, tooth brushes, etc. The class inspection which accompanies the talk consists of the pupils passing before the nurse who inspects the head, eyes, teeth, nose, throat and skin as they pass before her. This is not of course as thorough as the physical examination but serves as a quick survey of the general physical conditions of the children in the schools. In addition to this work in the schools the follow up service is carried on outside by personal visits to the home. During the year 2,277 home visits were made together with 555 trips to the City Dispensary to accompany the younger children there in groups for the various treatments.

Nutrition work including weighing and measuring was started in St. Michael's School during the year and data obtained on children found undernourished. These children were supplied with milk by the school authorities under the supervision of the nurse and a worker from the New Jersey Tuberculosis League. A start was also made in the Schick test for diphtheria and the subsequent toxin antitoxin immunization. The success of this will depend largely upon the results in the public schools where the test has been adopted by the Board of Education as a voluntary procedure.

#### EXCLUSIONS

In the course of their work the nurses find it necessary, not only for contagion but for many other reasons, to exclude children from the classrooms in order to remedy various con-

## POLICE CASES

Committed to Cidwell Penitentiary	16
Committed to Reformatory	1
Committed to State Home for Girls	1
Cases on Parole	4
Spec. Investigations	729
Prison cases	193
Total number of investigations	3,360

## FILM "END OF THE ROAD"

Shown at the Iron Bound Community House	583
Shown at the Y. W. C. A.	1,907
	2,292

ANNUAL REPORT

OF THE

Division of Tuberculosis

Defects carefully sought for by the nurses include uncleanliness and vermin. During the year 1,358 corners were found to be unclean in their corners. All of these of course were remedied without delay. Vermin and rats were found in 3,137 instances of which 1,450 were cleaned up.

The 595 cases of contagion included all the known cases such as scarlet fever, diphtheria, whooping cough and measles. One of the chief parts of the nurses' work is the exclusion of suspected cases of contagion and the following up of cases to see that a private physician is called in a lead is possible to the home.

The number of defects in this report should not be mistaken to indicate different children. In very particular, the same children are cared and then infected again. There were 2,379 vaccinations performed during the year incidentally nearly 95% of the public school children are vaccinated. There are few refusals to allow vaccination in these schools. The nurse takes personal care of the vaccination and is responsible for its care and successful termination. School treatments numbered 4,507. These include dressings for vaccinations and the various cuts, lacerations and minor accidental services required from time to time in the schools.

#### EXAMINATIONS AND CLASS INSPECTIONS

Physical examination of pupils numbered 17,443 for the year. It is the policy of the department to see that every child has a routine physical examination once annually and twice if possible. The physical conditions are recorded on history cards with exposed tabs attached, to indicate the various defects while they exist. This history card follows the pupil through school until graduation so that at the end of the school period the various defects can be followed up and the child finally graduating in as far as possible, a good physical condition. The defects found in these physical examinations or subsequent reinspections are followed up to see that the



ANNUAL REPORT  
OF THE  
Division of Tuberculosis

To Charles V. Craster, M. D., Health Officer.

DEAR SIR: I herewith present the report of the Tuberculosis Division for the year 1922. This covers the work accomplished through our clinics, the examinations of food handlers, the nurses, physicians and general field activities.

Respectfully,

M. J. FINE, M. D.,  
*Director.*

FIELD WORK

Although our Division has only seven nurses in the field instead of eight, one having been assigned to the Food Handler Clinic, whose duties are to take the histories and keep the records of the food handlers, the nurses this year have made twenty five hundred more visits than last year.

The National Tuberculosis Association has recommended a plan to see whether it is possible to treat the patients at home after having spent three months in a sanatorium where the patient has been instructed how to live and take care of himself and follow the same course in his own home. This will save the city and county a great deal of money, as under the present system the patient is kept in the sanatorium indefinitely, so that the number of beds must continually be increased.



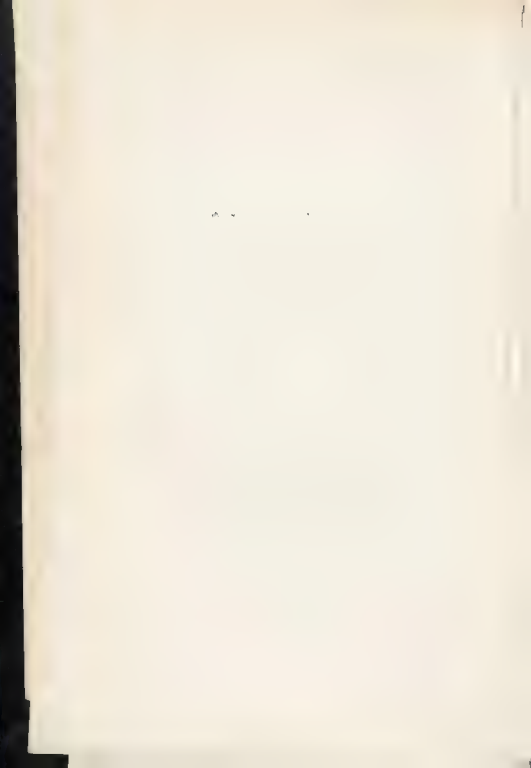
can do light work during the day attend the night clinics without interfering with their work. The clinic physicians have also made a number of home visits to patients who are unable to attend clinics giving the necessary treatment.

#### SOCIAL PROBLEMS

In view of the fact that the county sanatorium has decreased the number of beds and that general hospitals are disinclined to accept tuberculosis patients, the number of beds available for patients is less. This causes the waiting list for the different sanatoria to be much increased. The longer a patient waits at home to be admitted to a sanatorium, the greater becomes his poverty. The patient has to be fed properly and in so doing the other members are deprived of necessities, bringing about economic problems difficult of solution. Although unemployment is not as prevalent as in previous years, the bread winner is usually the one commonly affected with this disease. For that reason more cases have had to be referred to relief organizations. The question of housing is also a pressing one. The present high rental hits the tuberculous patient very hard and it is usually beyond his means to select a proper neighborhood. He is, therefore, driven to live in the poorest and more congested districts.

#### EXAMINATION OF CHILDREN

I have pointed out in previous reports that examination and prevention of the spread of tuberculosis among children is the most effective way of eliminating tuberculosis from the community. It is suspected that tuberculosis is mainly acquired in childhood. When the adult develops active tuberculosis it is regarded as a recurrence of a previous lesion acquired in childhood. We, therefore, endeavor to examine as many children as possible to discover early signs and keep them under proper treatment. We have examined 1,500 children for summer camps such as Roseland Avon-by-the-



is brought about by the early detection and treatment of the disease

In analyzing these figures we are again confronted with the high mortality among colored people. Not only is their general death rate twice that of the entire city, 24.9 per 1,000 as compared with 12.8, but from tuberculosis the figure reaches 442 per 100,000 as compared with 99.1 for the city. These figures are based on an estimated colored population of 17,500. Notwithstanding the fact that the colored death rate is proportionately much higher than the whites and in view of the fact that they are more prone to tuberculosis and their resistance is much less, the mortality this year among them is 74.1 lower than in 1921. The colored population has increased considerably in this city and there is a continuous migration from the south.

#### MORBIDITY

There were 1,192 cases of tuberculosis reported as compared with 1,247 last year and 1,790 in 1920, showing that the incidence as well as the mortality is on the decrease. That the physicians report practically all cases of tuberculosis is shown by means of checking up of the deaths with the cases reported. It was found that 82 per cent. of the deaths had already been reported, many of them as long as four years ago, the balance were reported within one month after death.

Professor C. E. A. Winslow, of Yale School of Medicine, issued a recent summary report on health measures for tuberculosis in the various cities of the country. In this report Newark is shown to rank very high and, in fact, approaching the perfect municipal tuberculosis unit.

As a final word to guard against over optimism, I would state that despite the great need for hospital beds there has been no increase in the bed capacity of our sanatoria in four years.

## HOME TREATMENT

Newark is the first city in the country to try this new method and for that purpose the New Jersey Tuberculosis League appropriated Five Thousand Dollars (\$5,000) to help put the patient's homes in such condition as to permit the home treatment. The National Tuberculosis Association together with the various Sanatoria, are co-operating in this work. The Division has detailed a special nurse, so that careful supervision and frequent visits are made to the homes of the patients under home treatment.

We have also instituted an urgent follow up of the cases discharged from the different sanatoria in order that the sanatoria may be informed as to the conditions of the discharged patients, and also to prevent the spread of the disease to other members of their families.

## CLINICS

The attendance at the various clinics of this Division was increased by five hundred; the greater increase being on the Garside Street and Clared Clinics. We have instituted a clinic at the Waverly District of the Associated Charities for the purpose of discovering unreported cases and to determine how many T. B. cases may be found among the poor applying for charitable aid. We have examined at that clinic three hundred and ninety nine patients (399) and a number of active and suspicious cases were found.

Attendance at the night clinic has also been increased, showing that patients working during the day are reporting at the evening clinic. Of such patients a number come for treatment who otherwise would have stayed away from a physician's office or clinic rather than lose a day's work. Some of these patients have been sent to sanatoria and their home conditions corrected and the other members of their families examined. The discharged sanatoria patients who

## REFERRED TO OTHER DEPARTMENTS FOR ATTENTION

	1922	1921
Lectecting Division		
Hospitals	482	972
Veneral Division	223	26
Sanitary Division	75	
Food and Drug Division	12	23
Child Hygiene Division	9	12
Poor and Alms Department	4	11
Immigration Department	7	20
Veteran's Bureau	1	
Labor Department	18	
American Red Cross	3	
United Hebrew Charities	1	
Bureau Family and Social Service	1	
State Board of Children's Guardians	3	
New Jersey Tuberculosis League	11	
Female Cadets	2	
	66	

## REFERRED BY OTHER ORGANIZATIONS

	1922	1921
Veterans' Bureau		
Labor Department	2	
American Red Cross	14	
Poor and Alms Department	12	
United Hebrew Charities	1	
Bureau Family and Social Service	3	
State Board of Children's Guardians	3	
New Jersey Tuberculosis League	26	
	5	

sea and others. Work has also been done among the parochial school children and I am glad to state that few active and suspicious cases have been discovered this year.

#### FOOD HANDLERS

During the year we have examined 6,213 food handlers. We found twenty four active cases of tuberculosis among them. Seventeen had been reported by outside physicians. All were compelled to discontinue handling food. Suitable cases were sent to sanatoria or to the country, where their conditions could be improved and the exposed families examined and followed up. The number of positive cases has been less than in previous years, showing the physical conditions of the employees in the food handling establishments are better, and the public is assured that food handled in restaurants is less contaminated in Newark than in other cities.

#### MORTALITY

The deaths from tuberculosis in Newark for 1922 numbered 428, which represents a death rate of 99.1 per 100,000, based on an estimated population of 432,000. This is most encouraging as it is the lowest rate from this cause in our history and is a continuation of a persistent and continuous decrease since the formation of the Tuberculosis Bureau in 1915, when the rate was 215.5. While there has been a decrease in mortality throughout the country, the improvement shown in Newark has been much greater and we venture to say that it is due considerably to the intensive activities of our Tuberculosis Bureau.

The investigation of reported cases, examination of contacts, food handlers, school children and applicants for summer camps, together with the visiting and instruction of sanatoria patients before admission and after they are discharged, all tend to decrease the number of fatal cases. This





## TUBERCULOSIS CASES FOR YEAR 1922

	1922	1921
Total number of cases reported.....	1,192	1,247
Total number of deaths (white).....	354	360
Total number of deaths (colored).....	74	86
Total number of visits made by doctors or nurses.....	16,889	17,335
Total number of patients examined at clinics.....	8,889	8,336
Total number of children examined at clinics.....	2,571	3,053
Total number adults examined at clinics (day).....	3,182	2,917
Total number colored examined at clinics.....	1,848	1,723
Total number examined at night clinic.....	271	241
Total number examined at Garside clinic.....	884	333
Total number examined at Waverly clinic.....	399	
Total number examined at Laryngeal clinic.....	14	50
Total number examined at Verona clinic.....	36	238
Total number examined at Soho clinic.....	182	310
Total number examined at Glen Gardner clinic.....	565	941
Total number of food handlers examined.....	6,213	
Total number suspicious cases re-examined.....	712	
Total number examined for Camp Newark.....	1,716	

Florist .....	1	Brakeman .....	1
Expressman .....	1	Butler .....	1
Embalmer .....	1	Cook .....	1
Welder .....	1	Electrician .....	1
Timekeeper .....	1	Laborer .....	1
Collector .....	1	Street Cleaner .....	1
Telephone Operator .....	1	Solderer .....	1
Mail Carrier .....	1	Ice Cream Maker .....	1
Real Estate Dealer .....	1	Maricurist .....	1
Handsewer .....	1	Servant .....	1
Farm .....	1	Chemical Operator .....	1
Investigator .....	1	Tinsmith .....	1
Physician .....	1	Auto Repairer .....	1
Carver .....	1	Sweeper .....	1
Iron Worker .....	1	Actor .....	1
Longshoreman .....	1	Bootblack .....	1
Lithograph Operator .....	1	Bill Poster .....	1
Purchasing Agent .....	1	Moulder .....	1
Shoemaker .....	1	Presshand .....	1
Welder .....	1	Art Worker .....	1
Accountant .....	1	Waiter .....	1
Teacher .....	1	Machine Operator .....	1
Sorter .....	1	Wood Worker .....	1
Planer .....	1	Broker .....	1
Sailor .....	1	Upholsterer .....	1
Valet .....	1	Handdresser .....	1
Contractor .....	1	Engraver .....	1
Laundress .....	1	Lamp Maker .....	1
Presser .....	1	Bottler .....	1
Builder .....	1	Acid Mixer .....	1
Twister .....	1	Bus Boy .....	1
Mill Hand .....	1	Milk Dealer .....	1
Miner .....	1		

TUBERCULOSIS CASES REPORTED DURING YEAR 1922 MONTHLY, BY SEX, COLOR, AGE

MONTH	Male	Females	White	Black	Total	AGE												Total
						Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	
January	62	47	0	13	59	1	3	4	3	3	5	3	3	5	6	5	5	10
February	63	52	89	1	152	3	3	1	9	10	3	16	9	2	2	10	6	107
March	6	84	133	24	247	1	5	10	11	14	35	77	2	9	4	131	14	140
April	62	34	68	25	149	4	5	5	5	15	44	15	29	9	4	55	115	150
May	7	41	106	1	155	1	3	8	10	2	23	21	18	13	8	5	3	90
June	47	39	84	2	172	3	3	5	8	10	4	11	11	7	2	2	2	30
July	49	4	5	5	63	3	6	6	6	13	31	3	8	9	4	1	8	40
August	1	1	0	5	6	2	5	1	1	1	1	1	1	1	1	1	1	10
September	6	10	8	1	25	2	3	3	5	6	3	13	15	23	5	1	6	76
October	20	0	3	6	29	1	3	4	5	6	3	13	15	10	8	1	80	100
November	42	12	6	3	63	1	6	1	1	1	2	3	10	8	1	1	1	31
December	57	14	89	14	174	1	3	9	4	4	4	4	4	4	1	1	1	91
Total	759	454	2,011	219	4,443	59	63	8	88	157	354	202	28	51	10	1	3	1,443
1922	759	454	2,011	219	4,443	59	63	8	88	157	354	202	28	51	10	1	3	1,443

ANNUAL REPORT  
OF THE  
Division of Child Hygiene

OCCUPATIONS OF REPORTED TUBERCULOSIS  
PATIENTS FOR YEAR 1917

Housework	259	Orkely	3
Labourers	149	Porters	3
Minors	120	Bookkeepers	3
Unemployed	98	Bartenders	3
Clerks	69	Laundrymen	3
Students	51	Merchants	3
Factory Hands	47	Mechanics	2
Ex-Soldiers	25	Nurses	2
Food Handlers	24	Retired	2
Machinists	16	Musicians	2
Salesmen	15	Nurse Girls	2
Tailors	14	Stenographers	2
Cheffs	13	Waitress	2
Painters	13	Litters	2
Drivers	13	Barbers	2
Carpenters	9	Chefs	2
Jewelers	9	Ice Men	2
Electricians	9	Storekeepers	2
Leather Workers	8	Teamsters	2
Polishers	8	Metal Workers	2
Watchmen	7	Bricklayers	2
Lakers	6	Foundry Workers	2
Hatters	6	Corsetiers	2
Plumbers	6	Sales Ladies	2
Inspectors	5	Stage Hands	2
Conductors	5	Managers	2
Peddlers	5	Blacksmiths	2
Cigar Makers	4	Tool Makers	2
Janitors	4	Assemblers	2
Hatters	4	Button Makers	2
Firemen	4	Soldier	1
Grinders	4	Packer	1
Foremen	4	Boilermaker	1
Teamsters	4	Maid	1
Printers	4	Boatman	1
Secretaries	3	Draftsman	1
Steamfitters	3	Casting Worker	1
Motormen	3	Cashier	1
Engineers	3	Foot Press	1
Dressmakers	3	Dyer	1

ANNUAL REPORT  
OF THE  
Division of Child Hygiene

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*Dr. Chas. V. Craster, D. P. H., Health Officer.*

DEAR SIR. I herewith present the report of this Division  
for the year 1922. Respectfully,

JULIUS LEVY, M. D.,  
*Director*

INFANT MORTALITY

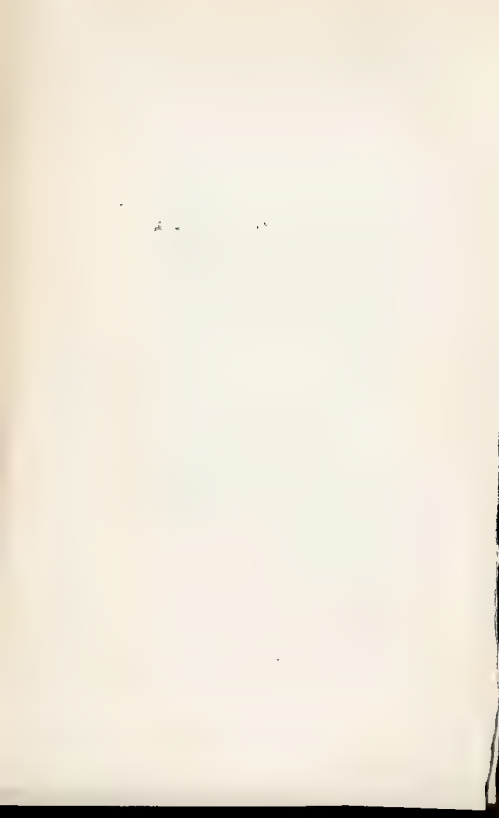
The infant mortality rate in Newark in 1922 was 74.8, which represents a slight increase over 1921 which, however, had presented the lowest rate reported in Newark.

CAUSES OF DEATH UNDER ONE YEAR

The slight increase in the 1922 rate over 1921 is due undoubtedly to conditions beyond the control of the activities of this Bureau, as can be seen by an examination of the deaths by causes.

The year 1922 presents a marked increase in the number of deaths due to measles, bronchitis, and pneumonia, that is the respiratory diseases that are so often the result of measles. An examination of the record indicates that in the even years there is always an increase in deaths from measles, while the odd years show the smallest number.

It is interesting to note the continuous and marked diminution in the deaths from meningitis and diarrhoea. Since 1918 there has been a continuous decrease in the deaths from meningitis. 1922 presents approximately a little less than





entire City. If one were to try to estimate the suffering and distress to the family of one preventable case of illness or the cost to the City and State, one could find sufficient reason on the basis of economy for a proper increase in the number of nurses that are carrying on child hygiene work in the City.

## BOARDING HOMES FOR CHILDREN

Nurses of active licensed homes on December 31, 1922	44
Requests for boarding homes	122
Infants boarded during 1922	96
Other solutions to problem	26
Infants in homes at end of year	41
Infants taken home by parents	55
Infants placed in institutions	0
Infants placed for adoption	1
Sick children	9
Died in boarding homes	0
Died on removal to hospital	2
Recovered completely	7

Twice as many children were placed out through this Division in 1922 as in 1921. This has resulted from a more general appreciation of the advantages of private boarding homes over institutions and particularly of homes licensed and supervised by the Department. Many children have been placed merely for a short period of time on account of the illness of the mother in the home or pending her return from a hospital. The standards in reference to boarding homes have been maintained particularly as relates to the number of children allowed in a single home, as it has been the policy to develop as many homes as possible that would board one child only. The desirability of this practice is well recognized by all students of infant care and serves as the principal criticism of institutions that admit or accept any considerable number of infants under one year of age. The nurses visit the boarding homes at least once a month and require the mothers to bring the children to the baby keep-well stations for observation and supervision.



larly interesting in the controversy as to the desirability of training, educating, and supervising midwives, as it had been held that such supervision and training would create the undesirable situation of increasing the number of women attended by midwives. The maternal mortality rate among women attended by midwives was 3.7 in contrast to 5.2, the rate for the City. It is desirable to state, as we have in previous reports, that in making up this maternal mortality rate every puerperal death attended by a midwife is charged to her, even though she does not appear to be responsible in any way for the result.

One of the great difficulties in obtaining proper results in the supervision of midwives has been the dual administration in the State Departments, as midwives are licensed by one board and supervised by another. A bill has been placed in the legislature to place all matters dealing with midwives under one department, this department to be the State Department of Health. From reports received it appears that a number of midwives have been licensed who have had very inadequate training or experience. It can readily be seen that no amount of supervision can compensate for this condition. It is hoped that with the proper control of this and other factors there will be a marked improvement in the care of mothers and the new-born infants.

#### UNMARRIED MOTHERS

Total number of illegitimate births in entire city.	145
Total number of cases reported to division.	138
Total number of cases not located.	6
Total number of cases not supervised by request of private doctor.	4
Total number of cases that refused supervision.	3
Total number of cases supervised by division.	125
Mothers who returned home with babies from hospitals.	102
Mothers who went with babies to Convalescent Home.	22
Mothers placed in positions with babies from Convalescent Home.	9
Mothers married, 17; to alleged fathers, 15.	17
Babies placed in boarding homes under six months of age.	3

one-third the deaths that appeared in 1918. The same is true of the deaths from diarrhoea. 1922 presents 153 deaths under one year, while in 1918 there were 273. Great importance is to be attached to this diminution in deaths, as it is undoubtedly the result of an extension of maternal nursing, sanitation and hygiene, and a more general application of the principles of proper infant care. It, therefore, can be considered an index of a generally increased healthfulness in all the infants of the City.

While there has been a diminution in deaths classified under early infancy, congenital debility, and prematurity, we are satisfied that a great deal more extensive and intensive work is required before we can feel that proper measures have been established for the prevention of these early deaths.

#### PREVENTION OF BLINDNESS

The effectiveness of any program for the prevention of blindness in infants depends in a large degree upon the number of cases of ophthalmia that are reported. In 1922, 121 were reported which represents an increase over 1921 of 10, 37 over 1920, and 93 over 1919. Of the reported cases, 13 were of gonorrheal origin. One child died and the others were cured. All the reported cases of ophthalmia are assigned for active supervision to the nurses in the districts, who are required to make daily reports that the infants are receiving proper attention and are under medical care. This phase of the work is considerably augmented by the active co-operation of the midwives, who have been instructed in promptly reporting cases of sore eyes, in the immediate use of silver nitrate as a preventive and in sending in smears whenever there is a discharge. While all the cases that are reported are placed under active supervision no matter where they live, we cannot properly feel that every precaution is being taken for the early discovery of ophthalmia and its prompt care and cure until there are a sufficient number of nurses to cover the

This has been an accurate estimate based on the unit system, which was established when the work was begun in 1913, whereby we can state quite accurately how many nurses are needed properly to protect the lives and maintain the health of expectant mothers, of infants, to prevent blindness among the new-born, to supervise boarding homes, and to protect unmarried mothers and their babies.

In 1922 the nurses supervised 3,265 new-born babies, which is but one-third of the total number of babies born in the city. In estimating the number of expectant mothers and infants that require and would be much benefited by supervision from child hygiene nurses, we will use as a basis the number of babies delivered by midwives and in the wards of hospitals, although from personal experience it can safely be said that at least half of the mothers whose babies are delivered by physicians would be much benefited by the instruction from child hygiene nurses in the care of their babies. 3,764 babies were delivered by midwives in 1922 and approximately the same number in hospitals. This would give at least 5,000 infants who should be placed under the regular supervision of the department. This would require, in connection with the other work that is included in our unit of supervision, at least 25 nurses in contrast to the 16 that are in the field at the present time. With Newark's experience with the results that have been obtained since 1913, when the Bureau of Child Hygiene was established, from its preventive child hygiene work, it is hoped that it will be sufficient formally to bring the above facts to your notice and that of the city to have enough nurses made available to protect properly the lives and health of the mothers and infants, so that

"Growth may be made more perfect.

Life more vigorous,

Decay less rapid,

And death more remote."

PREVENTION OF MATERNAL MORTALITY AND DEATHS  
OF THE FIRST MONTH

The year 1922 presents a maternal mortality rate of 5.2, which is lower than the rates of 1921 and 1920 but higher than the previous four years. This maternal mortality rate still represents an excessive amount of deaths among women in childbirth, as it is generally held that with proper prenatal care the rate would be 1 in 500 instead of 1 in 200 as it is in Newark. We feel compelled to call your attention to the fact that until an adequate number of nurses are placed in this Division for carrying on what is accepted as standardized prenatal care, we cannot expect any marked reduction in our maternal mortality rate. We have made every effort in the past three years to extend prenatal care and to make this important service available to as large a number of women as possible, although there has been practically no increase in the number of nurses for preventive child hygiene work since 1919. As a result of this more intensive work in this field 1,777 expectant mothers received prenatal care in 1922 over 1,290 in 1919. Your attention is called to the fact, however, that there are in Newark each year approximately 12,000 expectant mothers, of whom at least 8,000 receive very inadequate, if any, prenatal supervision. At least five nurses should be made immediately available for an extension of prenatal care. The situation in regard to maternal mortality was considered sufficiently grave to be brought to the attention of the Essex County Medical Society with the hope that they would appoint a committee to study this question especially as it relates to physicians and hospitals.

## SUPERVISION OF MIDWIVES

One of the interesting facts in relation to midwifery practice in Newark is the continuous reduction of the number of births attended by midwives. In 1916 they attended 48.7% of all the births, while in 1922, 34.2%. This fact is particu-

# STATISTICAL SUMMARY

## 1922 INFANT MORTALITY RATE

A. Deaths Under One Year per 1,000 Births	
1. For entire city..	74.8
2. For infants supervised by Division ..	34.5
B. Deaths Under One Month per 1,000 Births	
1. For entire City ..	35.3
2. For infants of mothers who received prenatal care from Division ..	26.0
C. Stillbirths per 1,000 Living Births—	
1. For entire city..	37.4
2. For infants of mothers who received prenatal care from Division ..	13.6
D. Puerperal Deaths per 1,000 Deliveries—	
1. For entire City ..	37.4
2. For mothers who received prenatal care from Division ..	4.8
E. Total births ..	10,993
Total deaths under one year..	822
Total deaths under one month....	389
Total stillbirths ..	422
Total puerperal deaths ..	58
Attended by midwives at any time ..	14
Attended by physicians... ..	24

# NURSES' ACTIVITIES

	1922	1921	1920	1919
Supervised babies born in 1922....	3,265			
Total number of supervised babies....	5,520	4,553	3,011	3,706
Nurses' visits to homes ..	40,331	37,095	32,591	30,783
Mothers' visits to consultation stations	7,768	6,625	3,963	3,920
Expectant mothers receiving prenatal care ..	1,777	1,684	1,680	1,290
Bad housing conditions reported..	204	660	666	448
Contagious diseases reported ..	110	82	141	33
Eye smears taken ..	107	55	69	27

Stillbirths .....	3
Supervised babies who died under one month of age in hospitals, 6; at home, 2 .....	8
Supervised babies who died under six months .....	10
Supervised babies who died under one year .....	12
Mothers who died in childbirth or within one month .....	1

The Convalescent Home has continued its good work among the unmarried mothers and "extra" babies during the year, having cared for 22 of the former and 7 of the latter whose mothers had died or were under observation for mental troubles or in hospitals. These "extra" babies have with one exception, been breast fed and all were up to normal weight when discharged.

The dispensing of pumped breast milk has been one of the more recent activities of the Home. During one period of three months, 488 ounces of milk were delivered to babies who were ill or in need of this type of nourishment. One girl made \$73.20 during this time for the amount she was able to contribute. All the girls who gave the milk nursed their own babies and all were paid at the rate of 15 cents per ounce. Each mother receives a complete physical and laboratory examination before she enters the Home. One girl was placed with her baby as a wet-nurse in a family with a very delicate baby. The patient is doing well, the girl is giving satisfaction, and her own baby is growing normally.

There were many more girls married from this group this year than ever before. This is in a great measure attributable to the activities of the Church Mission of Help, which continues to be of the utmost service to the Division in these cases. We have received excellent co-operation from Miss Hook, the Charge Nurse on Ward No. 14 of the City Hospital, from the Children's Aid Society, and from the Bureau of Social and Family Service.

#### CHILD HYGIENE NEEDS OF THE CITY

For the past five years a budget has been submitted to indicate the needs of the city in preventive child hygiene.



## Special Table of Vital Statistics

## DEATHS UNDER ONE YEAR FOR 1916-1922 BY CAUSES

YEARS	Months	Bronchitis	Pneumonia	Measles	Diphtheria	Scarlet Fever	Erysipelas	Whooping Cough	Dysentery	Others	Total
1916	23	55	122	24	106	86	135	85	76	96	766
1917	0	72	171	26	250	50	470	86	91	91	1,087
1918	33	84	156	30	273	83	442	112	73	73	1,126
1919	2	42	87	24	244	77	345	90	86	86	1,067
1920	16	57	143	19	191	66	462	100	94	94	1,066
1921	5	38	83	12	178	27	403	91	83	83	861
1922	14	44	128	11	153	22	362	88	81	81	861
Average for Seven Years	13	56	130	20	212	51	402	93	90	90	969

## PUERPERAL DEATHS, 1916-1922

	1916	1917	1918	1919	1920	1921	1922
Total number of puerperal deaths for entire City	26	29	53	56	76	74	58
Midwives in attendance at any time	6	6	10	8	7	10	14
Rate per 1,000 deliveries for entire City	2.2	2.4	4.5	4.9	6.4	6.1	5.2
Rate per 1,000 deliveries attended by midwives	1.0	1.0	1.8	1.5	1.4	2.2	3.7
Total number of births for entire City	11,446	11,850	11,601	11,315	11,734	11,705	10,993
Total number of births attended by midwives	5,582	5,695	5,338	5,148	4,712	4,470	3,764
Percentage of births attended by midwives	48.7%	48.0%	46.0%	45.4%	40.1%	38.1%	34.2%

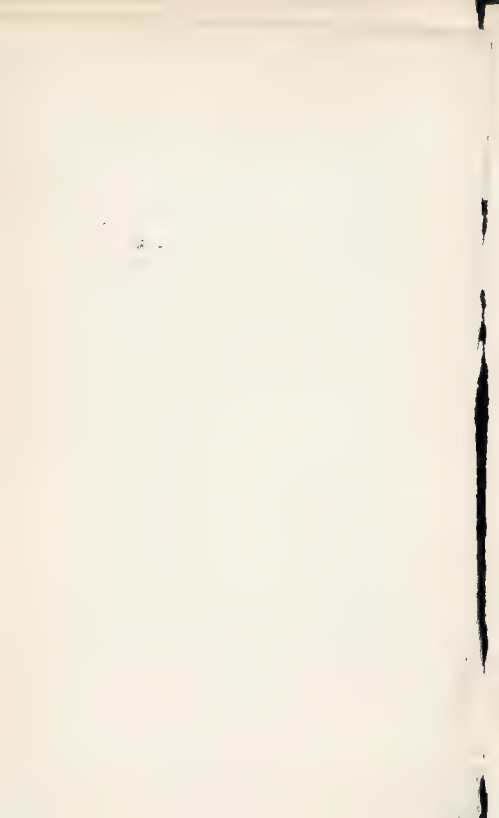
*Dr. Charles V. Craster, Health Officer*

DEAR SIR: -I hereby submit the Vita Statistics for 1922:

Death rate per 1,000 population .. .. .	12.1
Birth rate per 1,000 population... .. .	25.4
Deaths under one year per 1,000 births . . . . .	74.8

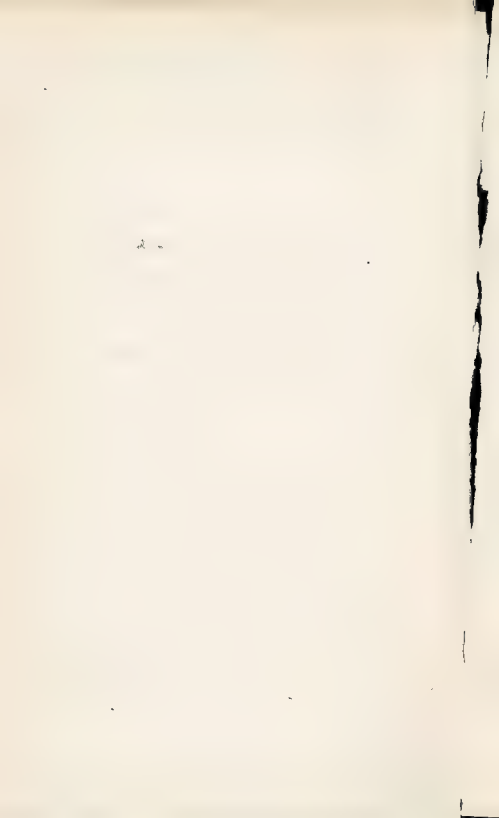
Respectfully submitted,

ELBERT L. BALL,  
*Clerk in Charge of Vital Statistics.*



OUR WAY FROM PAIN PAT, CAUSES OF DEATH BY MON H.S. 1911

[illegible]



Prudential Insurance Co. Building....	1
East Side Public Bath ..	1
Drug Store ..	2
New Centre Market ..	1
Newark Athletic Club ..	1
Doctor's Office ..	1
Essex County Jail ..	4
Pennsylvania Railroad Depot ..	1
Branch Brook Park ..	1
Branch Brook Lake ..	1
Morris Canal ..	9
Passaic River ..	5
Port Newark Trolley Trestle ..	1

### ANNUAL DEATH RATES FOR 1922 IN CITIES OVER 100,000 POPULATION

(Tabulation by the U. S. Bureau of Census, based upon estimated  
population, July 1, 1922.)

Cities	Population	Rate per 1,000 Population
Albany, O.	28,433	7.4
Seattle, Wash.	31,311	9.6
Minneapolis, Minn.	46,603	9.7
Cleveland, O.	854,565	10.3
Fort Worth, Tex.	114,717	10.5
Yonkers, N. Y.	105,422	10.7
Minneapolis, Minn.	400,970	10.7
Pittsburgh, Pa.	109,828	10.8
Dayton, O.	161,824	10.9
Grand Rapids, Mich.	143,572	11.1
Bridgeport, Conn.	143,555	11.1
Detroit, Mich.	993,678	11.1
Springfield, Mass.	140,652	11.1
Chicago, Ill.	2,833,288	11.2
Roseville, N. Y.	311,548	11.2
Oakland, Cal.	233,279	11.2
Norfolk, Va.	124,915	11.2
St. Paul, Minn.	239,836	11.4
Houston, Tex.	150,087	11.6
Portland, Ore.	269,240	11.7
Toledo, O.	266,717	11.7
Wilmington, Del.	115,568	11.9
New York City	5,839,746	11.9
Newark, N. J.	431,792	12.1
New Bedford, Mass.	127,542	12.1

## MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR.

DOOR YEAR 1991

[illegible]



GENERAL 1A.H. 7 NO 1, 1 22

Deaths from a  
 was not among  
 the victims of  
 the fire at the  
 hotel in New  
 Jersey.

AGES	WARDS																
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Under 1 year	50	13	42	14	48	15	24	30	23	36	18	31	24	43	17	25	455
Males, both sexes	34	8	28	6	38	6	15	11	18	22	12	36	15	38	14	20	318
Between 1 and 4	25	5	29	6	13	5	10	5	8	14	2	20	10	17	10	4	184
Males	22	10	15	4	13	4	6	8	7	19	5	11	8	16	4	6	158
Females	10	2	6	1	4	2	4	7	4	4	5	9	17	11	2	5	84
Between 5 and 14	8	2	2	1	2	2	4	3	5	8	1	6	3	6	4	4	61
Males	4	1	1	1	3	1	1	3	2	5	1	1	2	4	2	4	34
Females	3	4	5	1	4	2	2	2	1	3	1	3	3	8	2	4	47
Between 15 and 19	2	2	6	3	5	1	1	4	5	3	3	11	6	5	7	3	60
Males	6	7	4	2	2	2	2	3	1	3	2	2	3	2	5	5	40
Females	8	6	4	5	3	0	3	2	11	2	6	2	13	3	5	3	77
Between 20 and 24	3	2	9	1	3	4	4	3	3	2	4	7	0	8	1	1	69
Males	3	2	4	7	6	2	3	3	3	3	5	3	5	6	6	6	92
Females	2	4	7	7	6	2	3	3	3	3	5	3	5	9	4	6	92

## DEATHS IN INSTITUTIONS, ETC., FOR 1922

Newark City Hospital	94
St. Michael's Hospital	210
St. Barnabas's Hospital	55
St. James' Hospital	45
Beth Israel Hospital	129
Newark Memorial Hospital	86
Presbyterian Hospital	38
Lomerpatic Hospital	44
Newark Private Hospital	27
Clinton Private Hospital	26
Lincoln Private Hospital	7
Essex Private Hospital	13
St. Gerard's Hospital	12
Babies Hospital	72
Newark Maternity Hospital	16
Women's and Children's Hospital	30
North End Hospital	1
East End Hospital	2
Essex County Isolation Hospital (Newark residents)	114
Essex Mountain Sanatorium (Newark residents)	1
Essex County Hospital for Insane (Newark residents)	6
Lye and Ear Hospital	25
Dr. Wright's Hospital	2
Home for the Aged (Little Sisters of Poor)	34
Arthur P. Huey Home	1
Arthur Comfort Home	2
Ideal Home for Aged	6
Home for Crippled Children	2
Jewish Home	1
Home for Incurables	8
Florence Crittenden Home	4
Baptist Home	2
Alms House (Ivy Hall)	9
Home of Good Shepherd	5
Last Side Day Nursery	1
St. Mary's Orphanage	1
Factories	0
Lodging Houses	4
Hotels	2
Oppenheim Canteen	1
Dominican Convent	1
City Dispensary	1



Jersey City, N. J.	305,911	12.5
Paterson, N. J.	188,521	12.5
St. Louis, Mo.	795,008	12.5
New Haven, Conn.	169,987	12.6
Salt Lake City, Utah	123,918	12.6
Syracuse, N. Y.	181,022	12.6
Worcester, Mass.	183,446	12.7
Dallas, Tex.	171,922	12.7
Kansas City, Kan.	113,801	12.7
Cambridge, Mass.	111,944	13.1
Buffalo, N. Y.	528,173	13.2
Philadelphia, Pa.	1,894,500	13.2
Omaha, Neb.	260,739	13.3
Columbus, O.	253,457	13.3
Indianapolis, Ind.	333,257	13.4
Lubbock, Tex.	191,017	13.4
Spokane, Wash.	104,445	13.5
Lowell, Mass.	114,423	13.5
Providence, R. I.	241,011	13.8
Cincinnati, O.	121,415	13.8
Albany, N. Y.	250,877	13.9
San Francisco, Cal.	549,792	14.2
Baltimore, Md.	762,322	14.2
Pittsburgh, Pa.	679,422	14.3
Washington, D. C.	437,571	14.4
Roswell, Mass.	764,017	14.8
Richmond, Va.	178,344	14.8
Cincinnati, O.	404,865	15.0
Los Angeles, Cal.	634,866	15.2
Albany, N. Y.	116,223	15.6
Fall River, Mass.	130,790	15.9
Atlanta, Ga.	220,047	15.8
Denver, Col.	267,591	16.1
Trenton, N. J.	125,075	16.6
Nashville, Tenn.	120,332	16.6
New Orleans, La.	390,616	15.7
Memphis, Tenn.	167,862	18.4

Newark's death rate for 1922 is the twenty fourth lowest out of sixty two cities.

This rate is the second lowest on record for Newark, being only nine tenths of a point over the 1921 rate, which was the lowest recorded.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE, AND COLOR  
SECOND WARD, 1922

CAUSES	Yel- low	Col- ored	Water death	Total Males	Fe- males	Under 1 Year	Under 1 and 2 Under 3	Under 3 Years	5 to 10	15 to 20	25 to 30	35 to 40	45 to 50	55 to 60
Total. All causes	0	47	174	221	39	92	6	9	38	8	11	43	62	59
Infant. , Parv. and Typhoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stomach Dysentery	-	-	2	2	2	-	-	1	-	-	-	-	-	-
Measles	-	-	1	1	1	-	-	1	-	-	-	-	-	-
Scarlet fever	-	-	3	3	1	-	-	3	-	-	-	-	-	-
Whooping Cough	-	-	2	2	1	-	-	-	-	-	-	-	-	-
Dysentery	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infantile	-	-	1	1	1	-	-	1	-	-	-	-	-	-
Infantile (Cerebro Spinal)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Epidemic Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis of Lungs (Consumption)	-	5	15	40	10	4	-	-	-	-	0	5	7	2
Tuberculosis Meningitis	-	1	-	1	1	-	-	-	-	-	-	-	-	-
Other Tuberculosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cancer, Malignant Tumor	-	2	8	10	4	6	-	-	-	-	-	-	-	-
Simple Meningitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apoplexy, Softening of the Brain	-	2	9	11	4	7	-	-	-	-	-	-	-	-
Organic Heart Disease	-	8	10	27	15	15	-	-	-	-	-	-	-	-
Bronchitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia Lobar	-	4	16	20	15	5	-	-	-	-	-	-	-	-
Pneumonia Brachio	-	4	11	15	7	8	-	-	-	-	-	-	-	-
Not of Respiratory Diseases	-	4	4	4	2	2	-	-	-	-	-	-	-	-
Diseases of the Stomach (Cancer excepted)	-	2	4	4	2	2	-	-	-	-	-	-	-	-
Other Stomach Diseases (under 5 years)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appendicitis and Typhoid	-	2	3	3	2	1	-	-	-	-	-	-	-	-
Dermatitis, Lint, and Obstruction	-	-	1	1	1	1	-	-	-	-	-	-	-	-
Diseases of Liver	-	3	3	3	2	1	-	-	-	-	-	-	-	-
Bile and Digestive and Nephritis	-	1	1	1	1	1	-	-	-	-	-	-	-	-
Diseases of Women (not Cancer)	-	-	2	2	1	1	-	-	-	-	-	-	-	-
Periparturient Septicemia	-	-	1	1	1	1	-	-	-	-	-	-	-	-
Other Parturient Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conjunctivitis, Deafness, and Malformation	-	1	1	1	1	1	-	-	-	-	-	-	-	-
Age	-	5	15	20	11	9	-	-	-	-	-	-	-	-
Age	-	-	1	1	1	1	-	-	-	-	-	-	-	-
Declined Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Other Causes.	-	4	32	36	13	15	-	-	-	-	-	-	-	-
Total for Year, 1911	0	50	170	220	34	86	37	4	41	9	12	50	79	46

Tables for Year, vol.

The death rate for the second ward was 12.7 per cent of population as against 13.6 for the year as a whole. The percentage of population in the second ward is estimated for these calculations at 17.73.









WILLIAM BROWN, JR., BROWN BROTHERS, NEW YORK, N. Y.

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$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$	$\eta$	$\theta$	$\iota$	$\kappa$	$\lambda$	$\mu$	$\nu$	$\xi$	$\omicron$	$\pi$	$\rho$	$\sigma$	$\tau$	$\upsilon$	$\phi$	$\chi$	$\psi$	$\omega$	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

TOWARD 1922  
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

CAUSES	Y. 1901	Y. 1902	Y. 1903	Y. 1904	Y. 1905	Y. 1906	Y. 1907	Y. 1908	Y. 1909	Y. 1910	Y. 1911	Y. 1912	Y. 1913	Y. 1914	Y. 1915	Y. 1916	Y. 1917	Y. 1918	Y. 1919	Y. 1920	Y. 1921	Y. 1922	Y. 1923	Y. 1924	Y. 1925	Y. 1926	Y. 1927	Y. 1928	Y. 1929	Y. 1930	Y. 1931	Y. 1932	Y. 1933	Y. 1934	Y. 1935	Y. 1936	Y. 1937	Y. 1938	Y. 1939	Y. 1940	Y. 1941	Y. 1942	Y. 1943	Y. 1944	Y. 1945	Y. 1946	Y. 1947	Y. 1948	Y. 1949	Y. 1950	Y. 1951	Y. 1952	Y. 1953	Y. 1954	Y. 1955	Y. 1956	Y. 1957	Y. 1958	Y. 1959	Y. 1960	Y. 1961	Y. 1962	Y. 1963	Y. 1964	Y. 1965	Y. 1966	Y. 1967	Y. 1968	Y. 1969	Y. 1970	Y. 1971	Y. 1972	Y. 1973	Y. 1974	Y. 1975	Y. 1976	Y. 1977	Y. 1978	Y. 1979	Y. 1980	Y. 1981	Y. 1982	Y. 1983	Y. 1984	Y. 1985	Y. 1986	Y. 1987	Y. 1988	Y. 1989	Y. 1990	Y. 1991	Y. 1992	Y. 1993	Y. 1994	Y. 1995	Y. 1996	Y. 1997	Y. 1998	Y. 1999	Y. 2000	Y. 2001	Y. 2002	Y. 2003	Y. 2004	Y. 2005	Y. 2006	Y. 2007	Y. 2008	Y. 2009	Y. 2010	Y. 2011	Y. 2012	Y. 2013	Y. 2014	Y. 2015	Y. 2016	Y. 2017	Y. 2018	Y. 2019	Y. 2020	Y. 2021	Y. 2022	Y. 2023	Y. 2024	Y. 2025	Y. 2026	Y. 2027	Y. 2028	Y. 2029	Y. 2030	Y. 2031	Y. 2032	Y. 2033	Y. 2034	Y. 2035	Y. 2036	Y. 2037	Y. 2038	Y. 2039	Y. 2040	Y. 2041	Y. 2042	Y. 2043	Y. 2044	Y. 2045	Y. 2046	Y. 2047	Y. 2048	Y. 2049	Y. 2050	Y. 2051	Y. 2052	Y. 2053	Y. 2054	Y. 2055	Y. 2056	Y. 2057	Y. 2058	Y. 2059	Y. 2060	Y. 2061	Y. 2062	Y. 2063	Y. 2064	Y. 2065	Y. 2066	Y. 2067	Y. 2068	Y. 2069	Y. 2070	Y. 2071	Y. 2072	Y. 2073	Y. 2074	Y. 2075	Y. 2076	Y. 2077	Y. 2078	Y. 2079	Y. 2080	Y. 2081	Y. 2082	Y. 2083	Y. 2084	Y. 2085	Y. 2086	Y. 2087	Y. 2088	Y. 2089	Y. 2090	Y. 2091	Y. 2092	Y. 2093	Y. 2094	Y. 2095	Y. 2096	Y. 2097	Y. 2098	Y. 2099	Y. 2100	Y. 2101	Y. 2102	Y. 2103	Y. 2104	Y. 2105	Y. 2106	Y. 2107	Y. 2108	Y. 2109	Y. 2110	Y. 2111	Y. 2112	Y. 2113	Y. 2114	Y. 2115	Y. 2116	Y. 2117	Y. 2118	Y. 2119	Y. 2120	Y. 2121	Y. 2122	Y. 2123	Y. 2124	Y. 2125	Y. 2126	Y. 2127	Y. 2128	Y. 2129	Y. 2130	Y. 2131	Y. 2132	Y. 2133	Y. 2134	Y. 2135	Y. 2136	Y. 2137	Y. 2138	Y. 2139	Y. 2140	Y. 2141	Y. 2142	Y. 2143	Y. 2144	Y. 2145	Y. 2146	Y. 2147	Y. 2148	Y. 2149	Y. 2150	Y. 2151	Y. 2152	Y. 2153	Y. 2154	Y. 2155	Y. 2156	Y. 2157	Y. 2158	Y. 2159	Y. 2160	Y. 2161	Y. 2162	Y. 2163	Y. 2164	Y. 2165	Y. 2166	Y. 2167	Y. 2168	Y. 2169	Y. 2170	Y. 2171	Y. 2172	Y. 2173	Y. 2174	Y. 2175	Y. 2176	Y. 2177	Y. 2178	Y. 2179	Y. 2180	Y. 2181	Y. 2182	Y. 2183	Y. 2184	Y. 2185	Y. 2186	Y. 2187	Y. 2188	Y. 2189	Y. 2190	Y. 2191	Y. 2192	Y. 2193	Y. 2194	Y. 2195	Y. 2196	Y. 2197	Y. 2198	Y. 2199	Y. 2200	Y. 2201	Y. 2202	Y. 2203	Y. 2204	Y. 2205	Y. 2206	Y. 2207	Y. 2208	Y. 2209	Y. 2210	Y. 2211	Y. 2212	Y. 2213	Y. 2214	Y. 2215	Y. 2216	Y. 2217	Y. 2218	Y. 2219	Y. 2220	Y. 2221	Y. 2222	Y. 2223	Y. 2224	Y. 2225	Y. 2226	Y. 2227	Y. 2228	Y. 2229	Y. 2230	Y. 2231	Y. 2232	Y. 2233	Y. 2234	Y. 2235	Y. 2236	Y. 2237	Y. 2238	Y. 2239	Y. 2240	Y. 2241	Y. 2242	Y. 2243	Y. 2244	Y. 2245	Y. 2246	Y. 2247	Y. 2248	Y. 2249	Y. 2250	Y. 2251	Y. 2252	Y. 2253	Y. 2254	Y. 2255	Y. 2256	Y. 2257	Y. 2258	Y. 2259	Y. 2260	Y. 2261	Y. 2262	Y. 2263	Y. 2264	Y. 2265	Y. 2266	Y. 2267	Y. 2268	Y. 2269	Y. 2270	Y. 2271	Y. 2272	Y. 2273	Y. 2274	Y. 2275	Y. 2276	Y. 2277	Y. 2278	Y. 2279	Y. 2280	Y. 2281	Y. 2282	Y. 2283	Y. 2284	Y. 2285	Y. 2286	Y. 2287	Y. 2288	Y. 2289	Y. 2290	Y. 2291	Y. 2292	Y. 2293	Y. 2294	Y. 2295	Y. 2296	Y. 2297	Y. 2298	Y. 2299	Y. 2300	Y. 2301	Y. 2302	Y. 2303	Y. 2304	Y. 2305	Y. 2306	Y. 2307	Y. 2308	Y. 2309	Y. 2310	Y. 2311	Y. 2312	Y. 2313	Y. 2314	Y. 2315	Y. 2316	Y. 2317	Y. 2318	Y. 2319	Y. 2320	Y. 2321	Y. 2322	Y. 2323	Y. 2324	Y. 2325	Y. 2326	Y. 2327	Y. 2328	Y. 2329	Y. 2330	Y. 2331	Y. 2332	Y. 2333	Y. 2334	Y. 2335	Y. 2336	Y. 2337	Y. 2338	Y. 2339	Y. 2340	Y. 2341	Y. 2342	Y. 2343	Y. 2344	Y. 2345	Y. 2346	Y. 2347	Y. 2348	Y. 2349	Y. 2350	Y. 2351	Y. 2352	Y. 2353	Y. 2354	Y. 2355	Y. 2356	Y. 2357	Y. 2358	Y. 2359	Y. 2360	Y. 2361	Y. 2362	Y. 2363	Y. 2364	Y. 2365	Y. 2366	Y. 2367	Y. 2368	Y. 2369	Y. 2370	Y. 2371	Y. 2372	Y. 2373	Y. 2374	Y. 2375	Y. 2376	Y. 2377	Y. 2378	Y. 2379	Y. 2380	Y. 2381	Y. 2382	Y. 2383	Y. 2384	Y. 2385	Y. 2386	Y. 2387	Y. 2388	Y. 2389	Y. 2390	Y. 2391	Y. 2392	Y. 2393	Y. 2394	Y. 2395	Y. 2396	Y. 2397	Y. 2398	Y. 2399	Y. 2400	Y. 2401	Y. 2402	Y. 2403	Y. 2404	Y. 2405	Y. 2406	Y. 2407	Y. 2408	Y. 2409	Y. 2410	Y. 2411	Y. 2412	Y. 2413	Y. 2414	Y. 2415	Y. 2416	Y. 2417	Y. 2418	Y. 2419	Y. 2420	Y. 2421	Y. 2422	Y. 2423	Y. 2424	Y. 2425	Y. 2426	Y. 2427	Y. 2428	Y. 2429	Y. 2430	Y. 2431	Y. 2432	Y. 2433	Y. 2434	Y. 2435	Y. 2436	Y. 2437	Y. 2438	Y. 2439	Y. 2440	Y. 2441	Y. 2442	Y. 2443	Y. 2444	Y. 2445	Y. 2446	Y. 2447	Y. 2448	Y. 2449	Y. 2450	Y. 2451	Y. 2452	Y. 2453	Y. 2454	Y. 2455	Y. 2456	Y. 2457	Y. 2458	Y. 2459	Y. 2460	Y. 2461	Y. 2462	Y. 2463	Y. 2464	Y. 2465	Y. 2466	Y. 2467	Y. 2468	Y. 2469	Y. 2470	Y. 2471	Y. 2472	Y. 2473	Y. 2474	Y. 2475	Y. 2476	Y. 2477	Y. 2478	Y. 2479	Y. 2480	Y. 2481	Y. 2482	Y. 2483	Y. 2484	Y. 2485	Y. 2486	Y. 2487	Y. 2488	Y. 2489	Y. 2490	Y. 2491	Y. 2492	Y. 2493	Y. 2494	Y. 2495	Y. 2496	Y. 2497	Y. 2498	Y. 2499	Y. 2500	Y. 2501	Y. 2502	Y. 2503	Y. 2504	Y. 2505	Y. 2506	Y. 2507	Y. 2508	Y. 2509	Y. 2510	Y. 2511	Y. 2512	Y. 2513	Y. 2514	Y. 2515	Y. 2516	Y. 2517	Y. 2518	Y. 2519	Y. 2520	Y. 2521	Y. 2522	Y. 2523	Y. 2524	Y. 2525	Y. 2526	Y. 2527	Y. 2528	Y. 2529	Y. 2530	Y. 2531	Y. 2532	Y. 2533	Y. 2534	Y. 2535	Y. 2536	Y. 2537	Y. 2538	Y. 2539	Y. 2540	Y. 2541	Y. 2542	Y. 2543	Y. 2544	Y. 2545	Y. 2546	Y. 2547	Y. 2548	Y. 2549	Y. 2550	Y. 2551	Y. 2552	Y. 2553	Y. 2554	Y. 2555	Y. 2556	Y. 2557	Y. 2558	Y. 2559	Y. 2560	Y. 2561	Y. 2562	Y. 2563	Y. 2564	Y. 2565	Y. 2566	Y. 2567	Y. 2568	Y. 2569	Y. 2570	Y. 2571	Y. 2572	Y. 2573	Y. 2574	Y. 2575	Y. 2576	Y. 2577	Y. 2578	Y. 2579	Y. 2580	Y. 2581	Y. 2582	Y. 2583	Y. 2584	Y. 2585	Y. 2586	Y. 2587	Y. 2588	Y. 2589	Y. 2590	Y. 2591	Y. 2592	Y. 2593	Y. 2594	Y. 2595	Y. 2596	Y. 2597	Y. 2598	Y. 2599	Y. 2600	Y. 2601	Y. 2602	Y. 2603	Y. 2604	Y. 2605	Y. 2606	Y. 2607	Y. 2608	Y. 2609	Y. 2610	Y. 2611	Y. 2612	Y. 2613	Y. 2614	Y. 2615	Y. 2616	Y. 2617	Y. 2618	Y. 2619	Y. 2620	Y. 2621	Y. 2622	Y. 2623	Y. 2624	Y. 2625	Y. 2626	Y. 2627	Y. 2628	Y. 2629	Y. 2630	Y. 2631	Y. 2632	Y. 2633	Y. 2634	Y. 2635	Y. 2636	Y. 2637	Y. 2638	Y. 2639	Y. 2640	Y. 2641	Y. 2642	Y. 2643	Y. 2644	Y. 2645	Y. 2646	Y. 2647	Y. 2648	Y. 2649	Y. 2650	Y. 2651	Y. 2652	Y. 2653	Y. 2654	Y. 2655	Y. 2656	Y. 2657	Y. 2658	Y. 2659	Y. 2660	Y. 2661	Y. 2662	Y. 2663	Y. 2664	Y. 2665	Y. 2666	Y. 2667	Y. 2668	Y. 2669	Y. 2670	Y. 2671	Y. 2672	Y. 2673	Y. 2674	Y. 2675	Y. 2676	Y. 2677	Y. 2678	Y. 2679	Y. 2680	Y. 2681	Y. 2682	Y. 2683	Y. 2684	Y. 2685	Y. 2686	Y. 2687	Y. 2688	Y. 2689	Y. 2690	Y. 2691	Y. 2692	Y. 2693	Y. 2694	Y. 2695	Y. 2696	Y. 2697	Y. 2698	Y. 2699	Y. 2700	Y. 2701	Y. 2702	Y. 2703	Y. 2704	Y. 2705	Y. 2706	Y. 2707	Y. 2708	Y. 2709	Y. 2710	Y. 2711	Y. 2712	Y. 2713	Y. 2714	Y. 2715	Y. 2716	Y. 2717	Y. 2718	Y. 2719	Y. 2720	Y. 2721	Y. 2722	Y. 2723	Y. 2724	Y. 2725	Y. 2726	Y. 2727	Y. 2728	Y. 2729	Y. 2730	Y. 2731	Y. 2732	Y. 2733	Y. 2734	Y. 2735	Y. 2736	Y. 2737	Y. 2738	Y. 2739	Y. 2740	Y. 2741	Y. 2742	Y. 2743	Y. 2744	Y. 2745	Y. 2746	Y. 2747	Y. 2748	Y. 2749	Y. 2750	Y. 2751	Y. 2752	Y. 2753	Y. 2754	Y. 2755	Y. 2756	Y. 2757	Y. 2758	Y. 2759	Y. 2760	Y. 2761	Y. 2762	Y. 2763	Y. 2764	Y. 2765	Y. 2766	Y. 2767	Y. 2768	Y. 2769	Y. 2770	Y. 2771	Y. 2772	Y. 2773	Y. 2774	Y. 2775	Y. 2776	Y. 2777	Y. 2778	Y. 2779	Y. 2780	Y. 2781	Y. 2782	Y. 2783	
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TWENTH WARD 100  
MOS. A Y FROM TRINITY CAT SOUT OF ALH SEN, ME AND O. CR

[illegible]

NINTH WARD 19  
MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

[illegible]

# MORALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

IN FIFTH WARD, 1922

DEPARTMENT OF HEALTH

263

CAUSE

CAUSE	Male	Female	Total	White	Colored	Total	Under 5	5 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over
1. All causes	6	6	12	3	9	12	1	1	1	1	1	1	1	1
2. Tuberculosis	1	1	2	1	1	2	1	1	1	1	1	1	1	1
3. Pneumonia	1	1	2	1	1	2	1	1	1	1	1	1	1	1
4. Influenza	1	1	2	1	1	2	1	1	1	1	1	1	1	1
5. Measles	1	1	2	1	1	2	1	1	1	1	1	1	1	1
6. Whooping cough	1	1	2	1	1	2	1	1	1	1	1	1	1	1
7. Diphtheria	1	1	2	1	1	2	1	1	1	1	1	1	1	1
8. Scarlet fever	1	1	2	1	1	2	1	1	1	1	1	1	1	1
9. Typhoid fever	1	1	2	1	1	2	1	1	1	1	1	1	1	1
10. Typhus fever	1	1	2	1	1	2	1	1	1	1	1	1	1	1
11. Erysipelas	1	1	2	1	1	2	1	1	1	1	1	1	1	1
12. Smallpox	1	1	2	1	1	2	1	1	1	1	1	1	1	1
13. Malaria	1	1	2	1	1	2	1	1	1	1	1	1	1	1
14. Cholera	1	1	2	1	1	2	1	1	1	1	1	1	1	1
15. Dysentery	1	1	2	1	1	2	1	1	1	1	1	1	1	1
16. Diarrhea	1	1	2	1	1	2	1	1	1	1	1	1	1	1
17. Hemiplegia	1	1	2	1	1	2	1	1	1	1	1	1	1	1
18. Paralysis	1	1	2	1	1	2	1	1	1	1	1	1	1	1
19. Convulsions	1	1	2	1	1	2	1	1	1	1	1	1	1	1
20. Epilepsy	1	1	2	1	1	2	1	1	1	1	1	1	1	1
21. Suicide	1	1	2	1	1	2	1	1	1	1	1	1	1	1
22. Homicide	1	1	2	1	1	2	1	1	1	1	1	1	1	1
23. Unlabeled	1	1	2	1	1	2	1	1	1	1	1	1	1	1
24. Unknown	1	1	2	1	1	2	1	1	1	1	1	1	1	1
25. Total	6	6	12	3	9	12	1	1	1	1	1	1	1	1

The present population of the

$$(\alpha, \beta) \in \mathcal{R} \iff \exists \gamma \in \mathcal{R} \text{ s.t. } \gamma \leq \alpha \text{ and } \gamma \leq \beta$$
[illegible]



## DEPARTMENT OF PUBLIC AFFAIRS

MOULALTA IRAM PRINIPALAT  
FETINTA WARD 102  
ALSO OF DEATH REX AND AN COLLIER

[illegible]











TABLE 1. PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR

Cause of death	Total		Male		Female		White		Colored		Total		Male		Female		White		Colored		Total		Male		Female		White		Colored	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Total	10,000	100.0	5,000	100.0	5,000	100.0	4,000	100.0	6,000	100.0	10,000	100.0	5,000	100.0	5,000	100.0	4,000	100.0	6,000	100.0	10,000	100.0	5,000	100.0	5,000	100.0	4,000	100.0	6,000	100.0
Heart disease	1,200	12.0	600	12.0	600	12.0	800	20.0	400	6.7	1,200	12.0	600	12.0	600	12.0	800	20.0	400	6.7	1,200	12.0	600	12.0	600	12.0	800	20.0	400	6.7
Stroke	800	8.0	400	8.0	400	8.0	500	12.5	300	5.0	800	8.0	400	8.0	400	8.0	500	12.5	300	5.0	800	8.0	400	8.0	400	8.0	500	12.5	300	5.0
Pneumonia	600	6.0	300	6.0	300	6.0	400	10.0	200	3.3	600	6.0	300	6.0	300	6.0	400	10.0	200	3.3	600	6.0	300	6.0	300	6.0	400	10.0	200	3.3
Cancer	500	5.0	250	5.0	250	5.0	300	7.5	200	3.3	500	5.0	250	5.0	250	5.0	300	7.5	200	3.3	500	5.0	250	5.0	250	5.0	300	7.5	200	3.3
Tuberculosis	400	4.0	200	4.0	200	4.0	300	7.5	100	1.7	400	4.0	200	4.0	200	4.0	300	7.5	100	1.7	400	4.0	200	4.0	200	4.0	300	7.5	100	1.7
Diabetes	300	3.0	150	3.0	150	3.0	200	5.0	100	1.7	300	3.0	150	3.0	150	3.0	200	5.0	100	1.7	300	3.0	150	3.0	150	3.0	200	5.0	100	1.7
Alcoholism	200	2.0	100	2.0	100	2.0	150	3.7	50	0.8	200	2.0	100	2.0	100	2.0	150	3.7	50	0.8	200	2.0	100	2.0	100	2.0	150	3.7	50	0.8
Accidents	150	1.5	75	1.5	75	1.5	100	2.5	50	0.8	150	1.5	75	1.5	75	1.5	100	2.5	50	0.8	150	1.5	75	1.5	75	1.5	100	2.5	50	0.8
Infant mortality	100	1.0	50	1.0	50	1.0	80	2.0	20	0.3	100	1.0	50	1.0	50	1.0	80	2.0	20	0.3	100	1.0	50	1.0	50	1.0	80	2.0	20	0.3
Maternal mortality	50	0.5	25	0.5	25	0.5	40	1.0	10	0.2	50	0.5	25	0.5	25	0.5	40	1.0	10	0.2	50	0.5	25	0.5	25	0.5	40	1.0	10	0.2
Other causes	100	1.0	50	1.0	50	1.0	50	1.2	50	0.8	100	1.0	50	1.0	50	1.0	50	1.2	50	0.8	100	1.0	50	1.0	50	1.0	50	1.2	50	0.8

Source: U.S. Department of Health, Education and Welfare, Bureau of the Census, "Mortality in the United States, 1958-1962," Current Reports, No. 100, 1964.



MORTALITY FROM IRIN, IPA, CAN'S OF HEAVILY SEX AGE AND COLOR  
OCTOBER 1 22

122

[illegible]







2122

[illegible]

## Total A for Dec + 29 bet 19

$$q = \frac{\sum_{i=1}^n \hat{p}_i \cdot \frac{1}{\hat{p}_i} \cdot \frac{1}{\hat{p}_i} \cdot \frac{1}{\hat{p}_i}}{\sum_{i=1}^n \frac{1}{\hat{p}_i} \cdot \frac{1}{\hat{p}_i} \cdot \frac{1}{\hat{p}_i} \cdot \frac{1}{\hat{p}_i}} = \frac{\sum_{i=1}^n \frac{1}{\hat{p}_i^3}}{\sum_{i=1}^n \frac{1}{\hat{p}_i^4}}$$



# Mortality Statistics of Newark

FOR THE YEAR 1922

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INCLUDING NON-RESIDENT DEATHS ARRANGED TO  
GIVE DISEASE, AGE AND SEX ACCORDING TO INTER-  
NATIONAL CLASSIFICATION, COMPILED BY THE DIVI-  
SION OF VITAL STATISTICS, DEPARTMENT OF HEALTH,  
NEWARK, N. J.

## MORTALITY CAUSES ARRANGED AS FOLLOWS.

## MALE

- 1 General Diseases.
- 2 Nervous System and Organs of Special Sense.
- 3 Diseases of Circulatory System.
- 4 Diseases of Respiratory System.
- 5 Diseases of Digestive System.
- 6 Non Venereal Diseases of Genito Urinary System.
- 7 Diseases of Skin and Cellular Tissue.
- 8 Diseases of Bones and Organs of Locomotion.
- 9 Malformations.
- 10 Old Age.
- 11 External Causes—
  - Suicides.
  - Accidents.
  - Homicides.
- 12 Ill Defined Diseases.

## FEMALE

- 1 General Diseases.
- 2 Nervous System and Organs of Special Sense.
- 3 Diseases of Circulatory System.
- 4 Diseases of Respiratory System.
- 5 Diseases of Digestive System.
- 6 Non Venereal Diseases of Genito Urinary System.
- 7 The Puerperal State.
- 8 Diseases of Skin and Cellular Tissue.
- 9 Diseases of Bones and Organs of Locomotion.
- 10 Malformations.
- 11 Old Age.
- 12 External Causes—
  - Suicides.
  - Accidents.
  - Homicides.
- 13 Ill Defined Diseases.

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1927

CATS OF D. 24TH											
Age	Sex	Color	Size	Weight	Length	Height	Width	Depth	Area	Volume	Notes
1	♂	Black	Small	10	15	10	5	3	10	100	100
2	♀	Black	Medium	15	20	15	8	5	15	150	150
3	♂	Black	Large	20	25	20	10	6	20	200	200
4	♀	Black	Small	10	15	10	5	3	10	100	100
5	♂	Black	Medium	15	20	15	8	5	15	150	150
6	♀	Black	Large	20	25	20	10	6	20	200	200
7	♂	Black	Small	10	15	10	5	3	10	100	100
8	♀	Black	Medium	15	20	15	8	5	15	150	150
9	♂	Black	Large	20	25	20	10	6	20	200	200
10	♀	Black	Small	10	15	10	5	3	10	100	100
11	♂	Black	Medium	15	20	15	8	5	15	150	150
12	♀	Black	Large	20	25	20	10	6	20	200	200
13	♂	Black	Small	10	15	10	5	3	10	100	100
14	♀	Black	Medium	15	20	15	8	5	15	150	150
15	♂	Black	Large	20	25	20	10	6	20	200	200
16	♀	Black	Small	10	15	10	5	3	10	100	100
17	♂	Black	Medium	15	20	15	8	5	15	150	150
18	♀	Black	Large	20	25	20	10	6	20	200	200
19	♂	Black	Small	10	15	10	5	3	10	100	100
20	♀	Black	Medium	15	20	15	8	5	15	150	150
21	♂	Black	Large	20	25	20	10	6	20	200	200
22	♀	Black	Small	10	15	10	5	3	10	100	100
23	♂	Black	Medium	15	20	15	8	5	15	150	150
24	♀	Black	Large	20	25	20	10	6	20	200	200
25	♂	Black	Small	10	15	10	5	3	10	100	100
26	♀	Black	Medium	15	20	15	8	5	15	150	150
27	♂	Black	Large	20	25	20	10	6	20	200	200
28	♀	Black	Small	10	15	10	5	3	10	100	100
29	♂	Black	Medium	15	20	15	8	5	15	150	150
30	♀	Black	Large	20	25	20	10	6	20	200	200
31	♂	Black	Small	10	15	10	5	3	10	100	100
32	♀	Black	Medium	15	20	15	8	5	15	150	150
33	♂	Black	Large	20	25	20	10	6	20	200	200
34	♀	Black	Small	10	15	10	5	3	10	100	100
35	♂	Black	Medium	15	20	15	8	5	15	150	150
36	♀	Black	Large	20	25	20	10	6	20	200	200
37	♂	Black	Small	10	15	10	5	3	10	100	100
38	♀	Black	Medium	15	20	15	8	5	15	150	150
39	♂	Black	Large	20	25	20	10	6	20	200	200
40	♀	Black	Small	10	15	10	5	3	10	100	100

MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1924  $4 \times 10^{-6} \text{ sec.}^{-1}$

[illegible]





### MAIL MAGAZINES FIGURES FOR NEWARK FOR YEAR 1924

CATEGORIES		DEATH																									
Age	Sex	1	2	3	4	Total	5	10	5	8	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
1	M																										
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MULTI-MULTI-MULTI FIGURES FOR NEWARK FOR YEAR 1912 (continued)

[illegible]









FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1922--Continued

[illegible]

FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1922. Continued

CAUSES OF DEATH	Un- der All Ages	1	2	3	4	Total under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
Pulmonary Congestion	25	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gonorrhea of Lung	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Asthma	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Respiratory Sys.	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
V. DISEASES OF DIGESTIVE SYSTEM—Total	214	76	12	1	1	89	6	6	3	7	8	8	8	10	13	11	9	12	12	4	8	1	1	1
Diseases of Pharynx	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ulcer of Stomach	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Stomach	16	6	1	1	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diarrhea and Enteritis (under 2 years)	80	68	12	1	1	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diarrhea and Enteritis (2 years and over)	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Appendicitis and Typhlitis	37	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hernia	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Intestinal Obstruction	39	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Intestines	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Acute Yellow Atrophy of Liver	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cirrhosis of Liver	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Liver	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Simple Peritonitis (non-puerperal)	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Digestive Sys.	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
VI. DIS. OF GENITO-URINARY SYSTEM (Non-Veneral)—Total	158	1	3	1	1	6	3	1	6	6	5	10	15	18	17	15	16	26	33	30	22	18	10	1



FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1922—Continued

CAUSES OF DEATH		All Ages	Un der 1	1	2	3	4	Total under 5	5 9	10 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 over	
Acute Nephritis.....	26	1	3	1	—	—	—	5	1	1	2	2	2	2	3	1	2	1	1	1	1	1	1	1	1		
Bright's Disease.....	163	—	—	—	—	—	—	1	2	—	3	3	1	4	5	9	13	8	13	23	24	21	13	12	8	1	
Other Diseases of Kidneys.....	50	—	—	—	—	—	—	—	—	—	—	1	—	—	3	2	—	6	2	3	8	8	9	6	2		
Calculi of Urinary Passages.....	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Uterine Hemorrhage (non-puer- peral).....	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—		
Uterine Tumor (non-cancerous).....	3	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—		
Other Diseases of Uterus.....	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—	—		
Cysts and Tumors of Ovary.....	5	—	—	—	—	—	—	—	—	—	—	—	1	1	2	1	—	—	—	—	—	—	—	—	—		
Sarcoma, other Diseases of Pe- riovarian Gland.....	6	—	—	—	—	—	—	—	—	—	1	1	1	1	1	—	2	—	—	—	—	—	—	—	—		
VII. THE PUERPERAL STATE—																											
Total.....	58	—	—	—	—	—	—	—	—	—	4	11	13	14	11	5	—	—	—	—	—	—	—	—	—	—	
Accidents of Pregnancy.....	10	—	—	—	—	—	—	—	—	—	1	3	5	4	1	2	—	—	—	—	—	—	—	—	—	—	
Puerperal Hemorrhage.....	6	—	—	—	—	—	—	—	—	—	—	2	1	1	3	—	—	—	—	—	—	—	—	—	—	—	
Other Accidents of Labor.....	4	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	—	—	—	—	—	—	—	—	—	—	
Puerperal Septicæmia.....	18	—	—	—	—	—	—	—	—	—	1	5	5	4	2	1	—	—	—	—	—	—	—	—	—	—	
Puerperal Convulsions.....	13	—	—	—	—	—	—	—	—	—	2	3	1	3	3	1	—	—	—	—	—	—	—	—	—	—	
Pilegrinæ Alba Dolens, Embolus, etc.....	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
VIII. DISEASES OF SKIN—Total																											
Gangrene.....	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	1	2	3	—	1	1	2	—	—	
Furuncle.....	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	—	—	1	2	—	—	
Acute Abscess.....	6	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	—	—	—	—	